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onset®
HOBO® Data Loggers

PRODUCT CATALOG

Data Loggers
External Sensors
Software
Accessories

WELCOME!

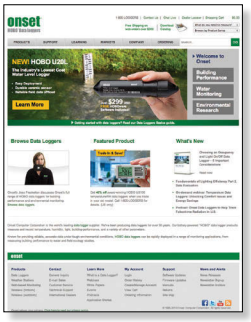
Thank you for your interest in Onset – the world leader in data loggers.

At Onset, we know how important your data is to you. Our HOBO data loggers and weather stations are designed from the ground up with quality and reliability in mind.

In this catalog, you will find a wide range of data logging solutions, including USB data loggers, web-based data logging systems, and wireless sensor networks.

For the very latest product updates and detailed product specifications, please visit us on the web at onsetcomp.com.

NEW! HOBO MX1101 temperature data logger measures and transmits temp/ RH data to mobile devices wirelessly via Bluetooth Smart technology.
See page 1



The award-winning HOBO UX90 Series is the industry's lowest-cost, most comprehensive family of "time-of-use" data loggers.
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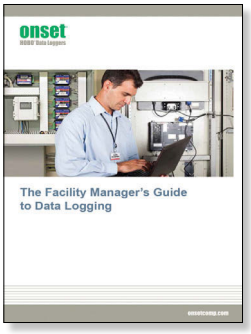
Web-based HOBO U30 systems deliver accurate energy and environmental data right to your desktop.
See page 15



The HOBO U26 Dissolved Oxygen Logger is a highly precise, low-cost data logger for measuring concentrations of oxygen in lakes, streams, rivers, estuaries, and coastal waters.
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Speak with a Product Application Specialist by calling:

1-800-564-4377

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NEW! HOBO MX1101 Logger

Bluetooth low energy temperature and relative humidity data logger

Onset's HOBO MX1101 is a Bluetooth-enabled data logger that measures and transmits temperature and relative humidity data wirelessly to mobile devices via Bluetooth Smart technology.

The self-contained wireless data logger, which works with Onset's free HOBOmobile app for logger setup and data management, enables users to access data anytime from their iOS mobile device over a 100-foot range. It communicates instantly and enables you to "cut the cord" by requiring no dedicated equipment beyond an iOS device for configuring the logger or reading out data. This saves considerable time and money.

Supported Measurements:

Temperature, Relative Humidity, Dew Point

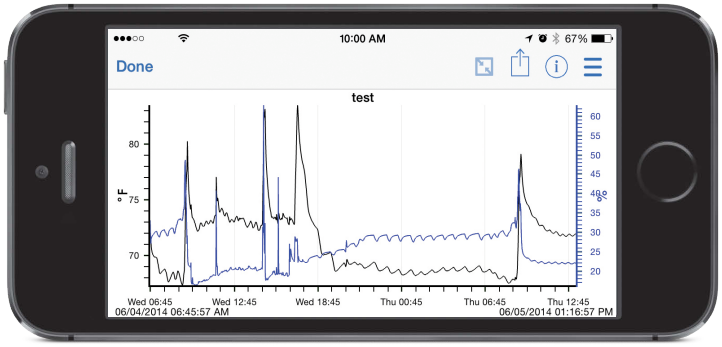
Minimum System Requirements:

HOBOmobile app

iOS mobile device*

Key Advantages:

- Bluetooth Smart-enabled for use with mobile devices
- No internet access, cables, or computer required
- Download data any time from 100 ft. away
- Audible and visual alarms keep you notified of problems
- Easily share data and graph images for analysis



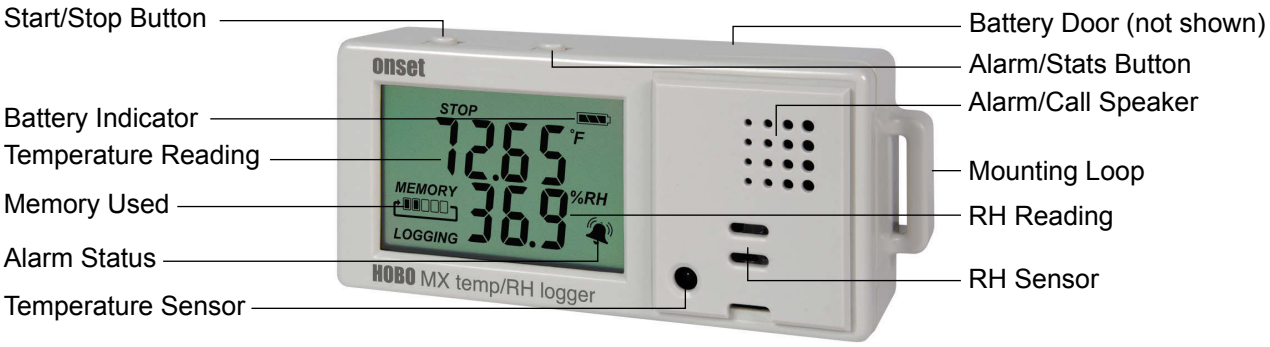
Using Onset's free HOBOmobile app, you can view data in graphs, check the operational status of loggers, configure alarm notifications, and share data files.

The logger is ideal for use in a range of building monitoring applications, such as tracking storage temperatures in a food warehouse, keeping tabs on humidity levels in a museum, or investigating occupant comfort complaints in an office building.

Download on the App Store

*iOS Compatible Device
– iPhone 4s or later
– iPod Touch 5th Generation or later
– iPad 3rd Generation or later
– iPad Mini 1st Generation or later
– Running iOS 7.1 or later & Bluetooth 4.0 or later

HOBO MX1101 Logger



Part number	MX1101
Price	$135
Memory	84,650 Measurements
Sampling Rate	1 second to 18 hours, user selectable
Battery Life	1 year, typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user replaceable, 2AAA
Dimensions	3.66 x 8.48 x 2.29 cm (1.44 x 3.34 x 0.9 in.)
	Temperature
Range	-20° to 70°C (-4° to 158°F)
Accuracy	±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)
Resolution	0.024°C at 25°C (0.04°F at 77°F)
Response Time	7.30 minutes in air moving 1 m/s (2.2 mph)
	Relative Humidity
Range	1% to 95%
Accuracy	±2% from 20% to 80% at 25°C (77°F)
Hysteresis	±2% RH
Resolution	0.01% at 25°C (77°F)
Response Time	20 seconds to 90% in air moving of 1 m/s (2.2 mph)
CE compliant	Yes
Mobile Device Compatibility	iPhone 4s or later, iPod Touch 5th Generation or later, iPad Mini or later, iPad 3 or later running iOS 7 or later
Bluetooth Compatibility	Bluetooth 4.0 or later (Bluetooth Low Energy, Bluetooth Smart)

HOBO UX100 Loggers

Next-generation family of temperature and humidity data loggers

The HOBO UX100 Series is Onset's next-generation family of data loggers for tracking temperature and relative humidity in indoor environments.

HOBO UX100 Series offer a dramatic price/performance advantage over competitive products by delivering higher accuracy, larger measurement capacity, and more LCD display features to make environmental data collection faster and easier than ever. The loggers provide a variety of features to reduce deployment time, and offer new logging modes for recording and displaying more detailed data without extensive post-processing or memory use.

Supported Measurements:

Temperature, Relative Humidity, Dew Point

Key Advantages:

- Easy-to-view LCD display
- Large memory capacity
- Flexible mounting options
- Visual high & low alarm thresholds
- New Burst and Statistics logging modes
- User-replaceable RH sensors
- Temp, humidity, and thermocouple models available

Minimum System Requirements:

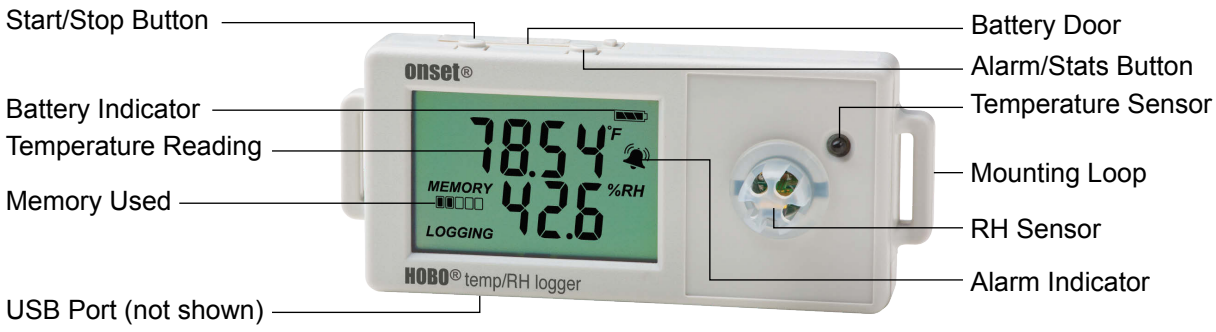
Software
See pg 33

USB cable*

*USB cable included with software

HOBO UX100 Loggers

Common Features of HOBO UX100 Series Loggers



Part number	UX100-001 (Temp)	UX100-003 (Temp/RH)	UX100-011 (Temp/RH)	UX100-023 (Ext Temp/RH)
Price	$75	$89	$125	$189
Memory	84,650 measurements			
Sampling Rate	1 second to 18 hours, user-selectable			
Battery Life	1 year typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user-replaceable, CR2032			
Dimensions	3.66 x 5.94 x 1.52 cm (1.44 x 2.34 x 0.6 in.)	3.66 x 8.48 x 1.52 cm (1.44 x 3.34 x 0.6 in.)		
Temperature				
Range	-20° to 70°C (-4° to 158°F)			
Accuracy	±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)			
Resolution	0.024°C at 25°C (0.04°F at 77°F)			
Response Time (airflow of 1 m/s (2.2mph))	8 minutes to 90%	4 minutes to 90%		6 minutes to 90%
Relative Humidity				
Range	n/a	15% to 95%	1% to 95%	
Accuracy	n/a	±3.5% from 25% to 85%	±2.5% from 10% to 90%	
Resolution	n/a	0.07% at 25°C (77°F)	0.05% at 25°C (77°F)	
Response Time (airflow of 1 m/s (2.2mph))	n/a	43 seconds to 90%	11 seconds to 90%	5 minutes to 90%
CE compliant	Yes			

Part number	UX100-014M (Thermocouple)		
Price	$139 (probes sold separately)		
Memory	208,076 measurements		
Sampling Rate	1 second to 18 hours, user-selectable		
Battery Life	1 year, typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user-replaceable, CR2032		
Dimensions	3.66 x 8.48 x 1.52 cm (1.44 x 3.34 x 0.6 in.)		
Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)		
Thermocouple (probes sold separately)	**Range**	**Accuracy**	**Resolution**
Type J	-210° to 760°C (-346° to 1,400°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C (0.06°F)
Type K	-260° to 1,370°C (-436° to 2,498°F)	±0.7°C (±1.26°F) ± thermocouple probe accuracy	0.04°C (0.07°F)
Type T	-260° to 400°C (-436° to 752°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.02°C (0.03°F)
Type E	-260° to 950°C (-436° to 1,742°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C at (0.05°F)
Type R	-50° to 1,550°C (-58° to 2,822°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
Type S	-50° to 1,720°C (-58° to 3,128°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
Type B	550° to 1,820°C (1,022° to 3,308°F)	±2.5°C (±4.5°F) ± thermocouple probe accuracy	0.1°C (0.18F)
Type N	-260° to 1,300°C (-436° to 2,372°F)	±1.0°C (±1.8°F) ± thermocouple probe accuracy	0.06°C (0.11°F)

HOBO UX90 Loggers

Next-generation time-of-use loggers for fast, reliable monitoring

The award-winning HOBO UX90 Series is the industry's lowest-cost, most comprehensive family of "time-of-use" data loggers. The new toolbox suite includes LCD-display data loggers for measuring motor on/off status, electronic pulses, state changes, and occupancy and light-use patterns.

Leveraging patent-pending technology, HOBO UX90 data loggers streamline energy audits and make field deployment fast and reliable.

Accompanying HOBOware software also reduces deployment time. Time-saving features allow HOBO UX90 users to batch-configure and readout hundreds of loggers in a fraction of the time. Additionally, the software features a Bulk Export Tool that allows users to export data files to text format for use in spreadsheets and other programs.

Supported Measurements: State, Pulse, Event, Runtime, Light On/Off, Motor On/Off, Occupancy/Light

Key Advantages:

- LCD displays Time On or % On, providing instant feedback
- Auto-calibration & signal strength indicator ensure proper deployment
- 84k or 346k measurement capacity enables longer deployments with fewer site visits
- Rare-earth magnets, 3M Command™ Strips, or mounting tabs for reliable mounting
- Flexible logger Start and Stop options
- HOBOware Pro's time-saving features allow for easy setup of hundreds of loggers

Minimum System Requirements:

Software
See pg 33

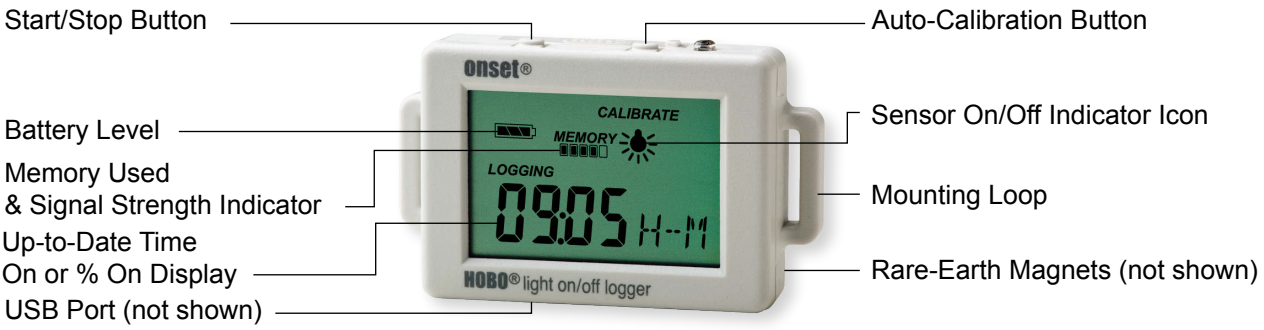
USB cable*

*USB cable included with software

For the most accurate readings, use of Light Pipe UX90-LIGHT-PIPE-1 is recommended to eliminate the effects of ambient light. See page 42 for more details.

HOBO UX90 Loggers

Common Features of HOBO UX90 Series Loggers



Part number	UX90-001 (State)	UX90-002 (Light On/Off)	UX90-004 (Motor On/Off)	UX90-005 (Occupancy/Light)	UX90-006 (Occupancy/Light)
Price	$92	$92	$92	$205	$205
Memory	84,000 measurements				

Part number	UX90-001M (State)	UX90-002M (Light On/Off)	UX90-004M (Motor On/Off)	UX90-005M (Occupancy/Light)	UX90-006M (Occupancy/Light)
Price	$121	$121	$121	$242	$242
Memory	346,000 measurements				
INTERNAL SENSOR					
Maximum state, event, runtime frequency	1 Hz	--	--	--	--
Light threshold	--	65 lux	--	65 lux	
Light type	--	LED, CFL, fluorescent, HID, incandescent, natural	--	LED, CFL, fluorescent, HID, incandescent, natural	
AC magnetic field threshold	--	--	> 40 mGauss at 60 Hz	--	--
Maximum sensor detection range	--	--	--	5 m (15.4 ft)	12 m (39.4 ft)
EXTERNAL INPUT					
External contact input	solid state closure or logic driven voltage output	--	solid state closure	--	--
Maximum state, event, runtime frequency	1 Hz	--	1 Hz	--	--
Maximum Pulse Frequency	50 Hz	--	--	--	--
Battery life	1 year typical, user replaceable, CR2032				
Operating range	-20° to 70°C (-4° to 158°F); 0-95% RH (non-condensing)				
Dimensions	3.66 x 5.94 x 1.52 cm (1.44 x 2.34 x 0.6 in)		3.66 x 8.48 x 1.52 cm (1.44 x 3.34 x 0.6 in)	3.66 x 8.48 x 2.36 cm (1.44 x 3.34 x 0.93 in)	3.66 x 8.48 x 2.87 cm (1.44 x 3.34 x 1.13 in)
CE compliant	Yes				

NEW! HOBO UX120 Plug Load Logger

Measures power and energy consumption of 120V office equipment plug loads

Onset's HOBO Plug Load Logger is a high-accuracy, easy-to-deploy data logger that measures and records the power and energy consumption of 120V plug loads from office equipment, vending machines, and other devices.

The logger provides 0.5% measurement accuracy with a measurement resolution of 1 watt, making it an ideal choice for building audits where detailed energy use data is required. The rugged housing is designed to withstand the rigors of real-world handling, providing reliable performance despite bumps, drops, and use under desks.

Supported Measurements: RMS voltage, RMS current, active power, active energy, apparent power, and power factor

Key Advantages:

- 0.5% measurement accuracy enables more reliable plug load energy use data
- "Meter Mode" provides instant viewing of real-time plug load variables
- Large memory enables faster logging intervals for more comprehensive plug load profiles
- Battery back-up ensures logged data remains intact in the event of a power outage or load failure
- Full-featured LCD display provides visual diagnostics for easy deployment
- Factory calibrated (see user's manual for details)

Minimum System Requirements:

Software
See pg 33

USB cable*

Part number	UX120-018
Price	$239
RMS Voltage Accuracy, RMS Current Accuracy, Active Power Accuracy, Power Factor Accuracy	0.5% up to 14 Amp continuous; up to 1.0% over 14 Amp when equipment being monitored is at 100% duty cycle
Power Factor Accuracy	±0.02
Drift	Up to 0.5% typical within 1 year
Memory	4 MB (1.4 million measurements, maximum)
Logging rate	1 second to 18 hours, 12 minutes, 15 seconds
Sampling rate	60 Hz or 16.67 mS single-cycle
Battery life	2 years with line power; 6 months battery only (no line power) with logging rate of 1 minute or greater operating at 25°C (77°F)
Power source	Line-powered with 0.92 m (3 ft) AC power cord or two AAA 1.5 V alkaline batteries, user replaceable
Resolution	1 Watt Load at 120 V AC 15 Amp
Operating temperature range	Logging: 5° to 40°C (41° to 104°F); 0 to 95% RH (non-condensing)
Dimensions	13.97 x 7.62 x 4.75 cm (5.5 x 3 x 1.87 in.)

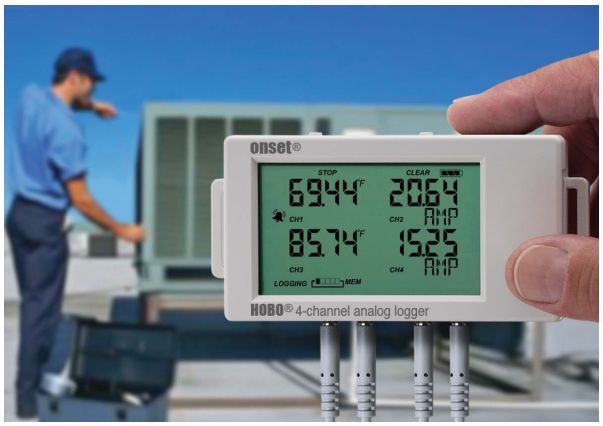
*USB cable included with software

HOBO UX120 4-Channel Analog Logger

Flexible, Accurate, 4-channel Analog Logger

The HOBO UX120-006M Analog Logger is a high-performance, LCD display data logger for building performance monitoring applications.

As Onset's highest-accuracy data logger, it provides twice the accuracy of previous models, a deployment-friendly LCD, and flexible support up to four external sensors for measuring temperature, current, CO2, voltage, and more.



Supported Measurements: Temperature, 4-20mA, AC Current, AC Voltage, Air Velocity, Carbon Dioxide, Compressed Air Flow, DC Current, DC Voltage, Gauge Pressure, Kilowatts, Volatile Organic Compound

Key Advantages:

- Twice the accuracy over previous models
- 16-bit resolution
- Flexible support for a wide range of external sensors
- LCD confirms logger operation and displays near real-time measurement data
- Provides minimum, maximum, average, and standard deviation logging options
- On-screen alarms notify you when a sensor reading exceeds set thresholds
- Stores 1.9 million measurements for longer deployments between offloads

Minimum System Requirements:

Software
See pg 33

USB cable*

Part number	UX120-006M
Price	$139
Memory	1.9 Million
Logging Rate	1 second to 18 hours, user selectable
Logging Modes	Normal, Burst, Statistics
Memory Modes	Wrap when full or stop when full
Time Accuracy	±1 minute per month at 25°C (77°F)
Battery Life	1 year typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user replaceable, 2 AAA
Dimensions	10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)
Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)
Accuracy	±0.1 mV ±0.1% of reading
CE Compliant	Yes

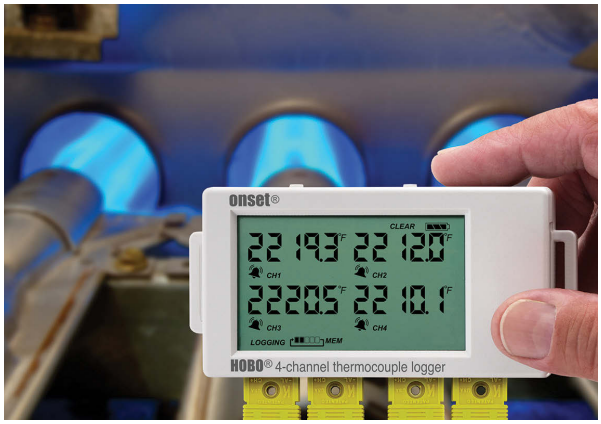
*USB cable included with software

HOBO UX120 4-Channel Thermocouple Logger

Log type J, K, T, E, R, S, B, or N thermocouples

The HOBO UX120 Thermocouple Logger is a four-channel LCD data logger for measuring and recording temperature in a range of monitoring applications. The logger makes it easy and convenient to record temperatures over a broad range (-260 to 1820° C) and can accept up to four J, K, T, E, R, S, B, or N type probes.

In addition to accepting four thermocouple probes, the logger features an internal temperature sensor for logging ambient temperatures, further extending the application possibilities.



Supported Measurements: Temperature

Key Advantages:

- Easy-to-view LCD display confirms logger operation and battery status
- Near real-time readout of current temperatures as well as minimum, maximum, average, and standard deviation statistics
- On-screen alarms notify you if temperatures exceed high or low thresholds
- Large memory capacity capable of storing 1.6 million measurements
- Start, stop, and restart push buttons
- User-upgradeable firmware

Minimum System Requirements:

Software
See pg 33

USB cable*

Note: for a single thermocouple input logger, please see pages 3-4

Part number	UX120-014M		
Price	$275 (probes sold separately)		
	Internal Temperature		
Range	-20° to 70°C (-4° to 158°F)		
Accuracy	±0.21°C from 0° to 50°C (±0.38°F from 32° to 122°F)		
Resolution	0.024°C at 25°C (0.04°F at 77°F)		
Drift	<0.1°C (0.18°F) per year		
	Logger		
Logging Rate	1 second to 18 hours		
Logging Modes	Normal, Burst, Statistics		
Memory Modes	Wrap when full or stop when full		
Time Accuracy	±1 minute per month at 25°C (77°F)		
Battery Life	1 year typical with logging rate of 1 minute and sampling interval of 15 seconds or greater, user replaceable, 2 AAA		
Dimensions	10.8 x 5.41 x 2.54 cm (4.25 x 2.13 x 1 in.)		
Operating Range	Logging: -20° to 70°C (-4° to 158°F); 0 to 95% RH (non-condensing)		
CE Compliant	Yes		
Thermocouple (probes sold separately)	**Range**	**Accuracy**	**Resolution**
Type J	-210° to 760°C (-346° to 1,400°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C (0.06°F)
Type K	-260° to 1,370°C (-436° to 2,498°F)	±0.7°C (±1.26°F) ± thermocouple probe accuracy	0.04°C (0.07°F)
Type T	-260° to 400°C (-436° to 752°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.02°C (0.03°F)
Type E	-260° to 950°C (-436° to 1,742°F)	±0.6°C (±1.08°F) ± thermocouple probe accuracy	0.03°C at (0.05°F)
Type R	-50° to 1,550°C (-58° to 2,822°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
Type S	-50° to 1,720°C (-58° to 3,128°F)	±2.2°C (±3.96°F) ± thermocouple probe accuracy	0.08°C (0.15°F)
Type B	+60° to 1,820°C (1,022° to 3,308°F)	±2.5°C (±4.5°F) ± thermocouple probe accuracy	0.1°C (0.18F)
Type N	-260° to 1,300°C (-436° to 2,372°F)	±1.0°C (±1.8°F) ± thermocouple probe accuracy	0.06°C (0.11°F)

*USB cable included with software

HOBO UX120 4-Channel Pulse Logger

Log pulse signals, events, state changes, and runtimes

The HOBO UX120 4-Channel Pulse data logger is a highly versatile, 4-channel energy data logger that combines the functionality of four separate energy loggers into one compact unit. It enables energy management professionals – from energy auditors to building commissioners – to easily track building energy consumption, equipment runtimes, and water and gas flow rates.

Supported Measurements: Pulse Signals, Event, Runtime, State, AC Current, AC Voltage, Amp Hour, Kilowatt Hours, Kilowatts, Motor On/Off, Power Factor, Volt-Amps, Watt Hours, Watts, Volt-Amp Reactive, Volt-Amp Reactive Hour (sensors sold separately)

Key Advantages:

- Simultaneously measures and records pulse signals, events, state changes, and runtimes
- Stores over 4 million measurements, enabling longer deployments with fewer site visits
- Streamlines deployment via range of start/stop options, logger status LEDs, and high-speed USB 2.0 data offload
- Works with Onset's E50B2 Power & Energy Meter to measure Power Factor, Reactive Power, Watt Hours, and more

Minimum System Requirements:

Software
See pg 33

USB cable*

Sensor
See pg 37

Part number	UX120-017	UX120-017M
Price	$215	$325
Memory	520,000 measurements	4,000,000 measurements
Sampling rate	1 second to 18 hours	
Battery life	1 year typical, user replaceable, 2 AA	
External contact Input	Electronic solid state switch closure or logic driven digital signals to 24V	
Max pulse frequency	120 Hz	
Max state, event, runtime frequency	1 Hz	
Resolution	Pulse: 1 pulse, Runtime: 1 second, State and Event: 1 state or event	
Bits	4 - 32 bits depending on pulse rate and logging interval	
Lockout time	0 to 1 second in 100 ms steps	
Operating temperature range	Logging: -40º to 70ºC (-40º to 158ºF); 0 to 95% RH (non-condensing)	
Dimensions	11.4 x 6.3 x 3.3 cm (4.5 x 2.5 x 1.3 inches)	
CE compliant	Yes	

*USB cable included with software

HOBO U12 4-Channel Loggers

Multi-channel energy & environmental monitoring

HOBO U12 data loggers provide flexibility for monitoring up to 4 channels of energy and environmental data with a single, compact logger. They provide 12-bit resolution measurements for detecting greater variability in recorded data, direct USB connectivity for convenient, fast data offload, and a 43K measurement capacity.

Supported Measurements: Temperature, Relative Humidity, Dew Point, 4-20mA, AC Current, AC Voltage, Air Velocity, Carbon Dioxide, Compressed Air Flow, DC Current, DC Voltage, Gauge Pressure, Kilowatts, Light Intensity, Volatile Organic Compound (some sensors sold separately)

Key Advantages:

- Records up to 4 channels
- Your choice of 2 models, with flexible measurement options
- Programmable as well as push-button start
- Compatible with a broad range of external sensors

Minimum System Requirements:

Software
See pg 33

USB cable*

Part number	U12-012 (Temp/RH/Light/Ext)	U12-013 (Temp/RH/2 Ext)
Price	$140	$140
Memory	43,000 measurements	
Sampling rate	1 second to 18 hours, user-selectable	
Battery life	1 year typical, user-replaceable, CR2032	
	Temperature	
Max range	-20° to 70°C (-4° to 158°F)	
Accuracy	± 0.35°C from 0° to 50°C (± 0.63°F from 32° to 122°F)	
Resolution (12-bit)	0.03°C @ 25°C (0.05°F @ 77°F)	
	Relative Humidity	
Measurement range	5% to 95% RH (non-condensing)	
Accuracy	± 2.5% typical, 3.5% maximum, from 10 to 90% RH	
Resolution (10-bit)	0.03% RH	
	Light Intensity	
	Designed for general purpose indoor measurement of relative light levels	
Range	1 to 3000 footcandles (lumens/ft2) typical 0-32,300 lumens/m2	
	External Input	
Range	0 to 2.5 VDC	
Accuracy	± 2 mV, ± 2.5% of absolute reading	
Resolution	0.6 mV	
CE compliant	Yes	

*USB cable included with software
For USB data logging applications in harsh indoor environments, see the 4-channel HOBO U12 Industrial data logger (U12-008) at onsetcomp.com

HOBO U12 Stainless Temp Loggers

High-accuracy temperature monitoring for challenging process conditions

HOBO U12 Stainless Temperature data loggers are ideal for food, pharmaceutical, autoclave, and other applications where high-accuracy temperature data is critical. They can withstand process conditions from pasteurization to flash freezing and washdown.

HOBO U12 Stainless Temperature Logger

Supported Measurements: Temperature

HOBO U12 Stainless Temperature Logger with 5-inch Probe

Key Advantages:

- High-accuracy, extended temperature range
- Suitable for high pressure applications to 2200 psi
- Fast readout via direct USB interface

Minimum System Requirements:

Software
See pg 33

USB cable*

Part number	U12-015	U12-015-02
Price	$272	$373
Memory	43,000 measurements	
Battery life	3 year typical, factory replaceable	
Response time	10 minutes (to 90% in airflow of 1 m/s) 3.5 minutes (to 90% in water)	2.25 minutes (to 90% in airflow of 1 m/s) 20 seconds (to 90% in water)
Operating range	Logging: -40° to 125°C (-40° to 257°F) Launch/readout: 0° to 50°C (32° to 122°F), per USB specification	
Range	-40° to 125°C (-40° to 257°F)	
Accuracy	± 0.25°C from 0° to 50°C (± 0.45°F from 32° to 122°F)	Accuracy: ± 0.25°C from 0° to 50°C (± 0.45°F from 32° to 122°F)
Resolution	0.03°C at 25°C (0.05°F at 77°F)	0.03°C at 25°C (0.05°F at 77°F)
Dimensions	17.5 x 101.6 mm (0.69 x 4.00 in)	Logger: 17.5 x 101.6 mm (0.69 x 4.00 in) Probe: 4 x 124 mm (0.16 x 4.90 in)
CE compliant	Yes	

*USB cable included with software

HOBO U14 Loggers

Display, record, and get notified of temperature and humidity conditions

HOBO U14 data loggers display, record, and provide alarm notifications of temperature and humidity conditions. Receive out-of-range alarm notifications with the optional Auto Dialer, or remote Audible Alarm. These loggers are well-suited for use in manufacturing, processing, and storage environments where reliable monitoring and documentation of specific temperature and relative humidity conditions are critical.

Supported Measurements:

Temperature, Relative Humidity, Dew Point

Key Advantages:

- Real-time display of temperature and relative humidity
- Alarm display and output ensure timely notification of out-of-range conditions
- Optional Remote Alarm and Autodialer
- Choice of two models: Internal Temp/Humidity or External Temp/Humidity sensors
- Optional protective case for harsh or outdoor environments
- Fast data offload via USB

Minimum System Requirements:

Software
See pg 33

Sensor*
See pg 37

USB cable[1]

Part number	**U14-001** (Temp/RH)	**U14-002** (Ext Temp/RH)*
Price	$230	$186
Memory	43,000 measurements	
Sample rate	1 second to 18 hours, recording times up to 1 year	
Battery life	1 year typical, user-replaceable, 3 AAA alkaline	
Range	Temp -20°C to 50°C (-4°F to 122°F)	
Accuracy	Temp ± 0.2°C from 0° to 50°C (± 0.36°F from 32° to 122°F) - RH ± 2.5% from 10 to 90%	
Resolution	0.03° at 25°C (0.05° at 77°F)	
Data channels	0	2
Measurement range	5% to 95% RH (non-condensing)	
Accuracy	± 3.5% RH from 25% to 95% over range of 5° to 55°C (41° to 131°F)	
Response time	Internal temp sensor • 15 min (to 90% in airflow of 1 m/sec) Internal RH sensor • 2 min (to 90% in airflow of 1 m/sec)	External temp Sensor • 5 min in airflow of 1 m/sec External RH Sensor • 5 min in airflow of 1 m/sec with protective cap
Dimensions	125 x 92 x 31 mm (4.9 x 3.6 x 1.2 in)	
CE compliant	Yes	

*Sensor required for U14-002 only

[1]USB cable included with software

HOBO ZW Series Wireless Sensors

Monitor and transmit real-time building performance data… wirelessly!

HOBO ZW Series wireless data nodes provide centralized monitoring of energy and environmental conditions in buildings.

Supported Measurements: Air Velocity, AC Current, AC Voltage, Amp Hour, $C0_2$, Compressed Air Flow, DC Current, DC Voltage, Differential Pressure, Gauge Pressure, Kilowatt Hours, Kilowatts, Power Factor, Pulse Signals, Temperature, Relative Humidity, Dew Point, Volatile Organic Compound, Volt-Amp Reactive, Volt-Amp Reactive Hour, Volt-Amps, Water Flow, Watt Hours, Watts, Volts, Amps, 0-10 VDC, 4-20mA

monitor not included

Key Advantages:

- Provides real-time centralized data collection within a facility
- Scales up to a network of 100 nodes sending data to a single receiver
- Creates self-healing network to overcome obstructions in communication paths
- Provides one year battery life @ 15-minute logging intervals
- Provides alarm notifications via email or text messages
- Features powerful software for organizing and viewing data as well as the wireless network

Minimum System Requirements:

Software (included) | Receiver | Data node

Part number	ZW-RCVR (Receiver)	ZW-001 (Data node)	ZW-003 (Data node)	ZW-005 (Data node)	ZW-006 (Data node)	ZW-007 (Data node)	ZW-008 (Data node)	ZW-ROUTER
Price	$199	$169	$249	$299	$219	$299	$219	$159
Buffer memory	up to 95k measurements	5k measurements	4k measurements	3k measurements				N/A
Measurements	N/A	Temp	Temp/RH	Ext T/RH, 1 analog port 1 pulse input port	4 external analog ports	Ext T/RH, 2 analog ports	2 analog ports 2 pulse input ports	N/A
Probe size	N/A	N/A	N/A	1cm (0.38 in) dia.	N/A	1cm (0.38 in) dia.	N/A	N/A
Sample rate	N/A	1 min to 18 hrs	1 min to 18 hrs	1 min to 18 hrs	1 min to 18 hrs	1 min to 18 hrs	1 min to 18 hrs	N/A
Transmission rate	N/A	2 min & greater	2 min & greater	2 min & greater	N/A	2 min & greater	2 min & greater	N/A
Power options (included)	AC adapter, Battery Backup, USB power	AC Power Adapter, Battery Backup						
Measurement range	N/A	Temp: -40° to 70°C (-40° to 158°F)	Temp: -40° to 70°C (-40° to 158°F) RH: 5 to 95% RH	Temp: -40° to 70°C (-40° to 158°F) RH: 5 to 95% RH Analog: o to 2.5 VDC Pulse: 0 to 65,535 pulses per logging interval	Analog channels: 0 to 2.5 VDC; 0 to 5 VDC	Temp: -40° to 70°C (-40° to 158°F) RH: 5 to 95% RH	Analog channels: 0 to 2.5 VDC; 0 to 5 VDC	N/A
Accuracy	N/A	Temp: ± 0.21°C from 0° to 50°C (± 0.38°F from 32° to 122°F)	Temp: ± 0.21°C from 0° to 50°C (± 0.38°F from 32° to 122°F) RH: ± 2.5%	Temp: ± 0.21°C from 0° to 50° C (± 0.38°F from 32° to 122°F) RH: ± 2.5% Analog: ± 1.544 mV + 2%	Analog: ±1.544 mV plus 2% of reading	Temp: ± 0.21°C from 0° to 50°C (± 0.38°F from 32° to 122°F) RH: ± 2.5% Analog: ± 1.544 mV + 2%	Analog: ± 1.544 mV plus 2% of reading	N/A
Resolution	N/A	Temp: 0.02°C @ 25°C (0.04°F @ 77°F)	Temp: 0.02°C @ 25°C (0.04°F @77°F) RH: 0.03%	Temp: 0.02°C @ 25° C (0.04°F @77° F) RH: 0.03% Analog channel: 0.6 mV Pulse Channel: 1 pulse	Analog channel: 0.6 mV	Temp: 0.02°C @ 25°C (0.04°F @77°F) RH: 0.03% Analog channel: 0.6 mV	Analog channel: 0.6 mV Pulse Channel: 1 pulse	N/A
Range	Approx. 100 m (300 ft.) depending on obstructions or interference							
Dimensions	96.5 x 108 x 28 mm (3.8 x 4.25x 1.1 in)							
CE compliant	Yes							

HOBO U30 Remote Monitoring Systems

Real-time access to data from any web browser

HOBO U30 Remote Monitoring Systems enable real-time, remote access to your data via cellular, Wi-Fi, or Ethernet communications. They can be configured with any combination of external Smart Sensors, and have been designed with an industrial-grade, tamperproof enclosure.

Supported Measurements:

Indoor Environmental: Temperature, Relative Humidity, Dew Point, C02, Air Velocity, VOC

Energy/Power: 4-20mA, AC Current, AC Voltage, Amp Hour, Amps, Compressed Air Flow, DC Current, DC Voltage, Differential, Pressure, Gauge Pressure, kW, kWh, Power Factor, Pulse Input, Volt-Amp Reactive, Volt-Amp Reactive Hour, Volt-Amps, Volts, Water Flow, Watt Hours, Watts

Key Advantages:

- Web-based energy and environmental monitoring
- Electronics are housed in an industrial-grade, tamperproof enclosure
- Setup is quick and easy with plug-and-play sensors
- Measures a wide range of energy and environmental parameters
- GSM Cellular, Wi-Fi, Ethernet, direct USB options available
- Optional analog inputs with configurable sensor power

Minimum System Requirements:

Software See pg 33 | Data plan* | Power source[1] | Sensor See pg 37

Part number	U30-GSM	U30-WIF	U30-ETH
Price	Starts at $850	Starts at $789	Starts at $694
GSM Wireless Comm (U30-GSM)	Quad-Band GSM/GPRS 850/900/1800/1900 MHz		
Wi-Fi Wireless Comm (U30-WIF)	2.412 - 2.484 GHz IEEE 802.11 b/g		
Ethernet (U30-ETH)	10Base-T or 100Base-TX (using external RJ45 jack) 256-bit AES Rijndael encryption		
Alarm Relay	Can be activated, deactivated or pulsed on user-defined sensor alarms.		
Alarm Notification Latency	Logging interval plus 2 to 4 minutes (typical)		
Smart-Sensor Inputs	5 or 10		
Data Channels	Maximum of 15 (some sensors use more than one data channel)		
Normal Operating Range	-20 to 40ºC (-4 to 140ºF)		
Extended Operating Range	-40 to 60ºC (-40 to 140ºF) see battery life		
Local Communication	USB		
Data Storage Memory	512K bytes local storage in non-volatile flash memory		
Logging Interval	1 minute to 18 hours, user-specified		
Station-to-Internet Upload Interval	10 minutes minimum, user-specified (depends on HOBOlink data service plan)		
Power	An Onset solar panel (1.2w, 3w, 6w) or AC adapter is required		
Battery Life	3-5 years, 4 volt 10 AHr rechargeable sealed lead acid		
Dimensions	17.8 x 11.7 x 19.3 cm (7.0 x 4.6 x 7.6 in)		
CE Compliant	Yes		

*A complete U30 remote monitoring system requires a data plan (U30-NRC is data logger only and does not require a data plan).
[1]AC power adapter or solar panel required. See page 38. For more details, please visit onsetcomp.com, or call us at 1-800-564-4377.

HOBO Energy Logger

Multi-channel energy data logging system

The HOBO Energy Logger multi-channel data logger is a modular, reconfigurable data logging system for energy and industrial monitoring applications.

The 15-channel system enables energy and facility management professionals to quickly and easily solve a broad range of monitoring applications without having to purchase a toolbox full of data loggers.

Supported Measurements: Temperature, Relative Humidity, Dew Point, 4-20mA, AC Current, AC Voltage, Air Velocity, Amp Hour, Carbon Dioxide, Compressed Air Flow, DC Current, DC Voltage, Differential Pressure, Gauge Pressure, Kilowatt Hours, Kilowatts, Power Factor, Pulse Input, Volatile Organic Compound, Volt-Amp Reactive, Volt-Amp Reactive Hour, Volt-Amps, Water Flow, Watt Hours, Watts, Wind

Key Advantages:

- Records up to 15 channels
- Provides 12v excitation for third-party sensors
- Pre-configured Smart Sensors for fast setup
- Signal conditioning modules retain configurations until you change them, providing plug-and-play convenience for commonly used sensors
- Flexible power options include battery operation or AC power adapter
- Works with Onset's E50B2 Power & Energy Meter to measure Power Factor, Reactive Power, Watt Hours, and more

Minimum System Requirements:

Software
See pg 33

Interface Cable*

Sensor
See pg 37

Part number	H22-001
Price	$364
Memory	512K nonvolatile flash data storage
Operating Range	-20° to 50°C (-4° to 122°F) with alkaline batteries -40° to 60°C (-40° to 140°F) with lithium batteries
Sensor Inputs	6 RJ-12 Smart Sensor jacks plus 3 FlexSmart module slots
Communication	RS-232 via 3.5 mm serial port*
Logging Interval	1 second to 18 hours, user-specified interval
Sensor Excitation	12 V DC at 200 mA total, with user-programmable warm up time on a per-channel basis
Battery Life	1 year typical
Battery Type	8 standard AA alkaline batteries (included)
External Power	Supports optional 13.6 V DC regulated AC Wall Adapter Connector
Time Accuracy	0 to 2 seconds for the first data point and ± 5 seconds per week at 25°C (77°F)
Dimensions	15.6 cm x 8.4 cm x 4.6 cm (6.13 in x 3.31 in x 1.81 in)
CE Compliant	Yes

*USB to Serial interface cable, part #CABLE-PC-3.5. See page 41

HOBO Pro v2 Loggers

Weatherproof loggers for outdoor temperature and humidity measurements

HOBO Pro v2 data loggers are weatherproof loggers that provide high-accuracy temperature and relative humidity measurements in a wide range of outdoor environments.

Supported Measurements:

Temperature, Relative Humidity, Dew Point

Key Advantages:

- Weatherproof housing for use in outdoor or condensing environments
- High-accuracy measurements
- Replaceable RH sensor provides superior recovery from condensing conditions
- Small-diameter, external sensor versions for measurements in tight spaces
- Optic USB interface for fast and reliable download

Minimum System Requirements:

Software See pg 33
Base Station* See pg 43
Coupler[1]

Part number	U23-001 (Internal Temp/RH)	U23-002 (External Temp/RH)	U23-003 (2x External Temp)	U23-004 (Temp/External Temp)
Price	$170	$199	$170	$145
Memory	42,000 measurements			
Sampling rate	1 second to 18 hours, fixed rate or multiple logging intervals			
Battery life	3 years typical, user-replaceable,1/2 AA lithium			
	Internal Temperature			
Measurement range	-40° to 70°C (-40° to 158°F)			
Accuracy	± 0.21°C over 0° to 50°C (± 0.38°F over 32° to 122°F)			
Resolution (12-bit)	± 0.02°@ 25°C (± 0.04°@ 77°F)			
Stability (drift)	< 0.1°C (0.18°F) per year			
	Relative Humidity (U23-001 & U23-002 only)			
Measurement range	0 to 100% RH, -40° to 70°C (-40° to 158°F)			
Accuracy	± 2.5% from 10% to 90% RH (typical), to a maximum of ± 3.5% including hysteresis			
Resolution (12-bit)	0.03%			
	External Temperature			
Measurement Range	U23-002: -40° to 70°C (-40° to 158°F), U23-003 & U23-004: -40° to 100°C (-40° to 212°F) with sensor tip and cable immersion in fresh water up to 50°C (122°F) for one year			
Accuracy	± 0.21°C from 0° to 50°C (± 0.36°F from 32° to 122°F)			
Resolution	0.02°@ 25°C (0.04°@ 77°F)			
Dimensions	Housing measures 10.2 × 3.8 cm (4.0 × 1.5 in.)			
CE compliant	Yes			

*HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[1]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

HOBO RG3 Rain Gauge

Rainfall data logging system

The HOBO RG3 data logging rain gauge is a self-contained device that includes an integrated data logger with a high-quality tipping-bucket rain gauge. The RG3's logger has a built-in temperature sensor and is on a cable so it can be used in an optional radiation shield for logging air temperature.

Supported Measurements: Rainfall, Temperature

Key Advantages:

- Aluminum housing and 15.4 cm (6.06 in) collector ring
- Field-proven design
- Logger can be moved into an optional radiation shield for logging air temperature
- Three mounting feet to use on flat, level surfaces
- Side bracket for mast mounting (hose clamps included)
- Self-emptying for continuous rainfall logging

Minimum System Requirements:

Software
See pg 33

Base Station*
See pg 44

Part numbers	RG3-M, RG3
Price	$420
Memory	Events only: 16K to 23K events Events and temperature: 25K to 30K data points
Measurement range	Up to 320 cm (RG3-M), up to 160 in (RG3)
Resolution	0.2 mm (RG3-M), 0.01 in (RG3)
Time stamp resolution	1 second
Maximum Rainfall rate	12.7 cm (5 in) per hour
Battery life	1 year typical, user-replaceable, CR2032
	Temperature
Measurement range	-20° to 70°C (-4° to 158°F)
Accuracy	± 0.53°C from 0° to 50°C (± 0.95°F from 32° to 122°F); a solar radiation shield is required for temperature measurements in sunlight
Resolution	0.14°C at 25°C (0.25°F at 77°F)
Sample rate	1 second to 18 hours, user-selectable
Dimensions	15.2 cm diameter x 25.7 cm high (6 x 10 in) 1.2 kg (2.5 lbs)
CE compliant	Yes

*HOBO Base Station or HOBO Waterproof Shuttle required. See pages 43-44 for more details.

HOBO Pendant® Event

Measures temperature, events and rainfall

The HOBO Pendant Event data logger is ideal for rainfall logging and connects to most standard tipping-bucket rain gauges to determine rainfall rates, times, and duration.

Supported Measurements: Temperature, Event, Rainfall

Key Advantages:

- Records tips or momentary contact closures and temperature
- Event-based data storage provides detailed data and efficient memory usage
- Stores over 16,000 tips (160 inches of rainfall with a 0.01-inch rain gauge)
- Includes scaling to inches, millimeters, or other units

Minimum System Requirements:

Software
See pg 33

Base Station*
See pg 44

Price	$105
Memory	Events only: 16K to 23K events Events and temperature: 25K to 30K data points
Battery life	1 year typical, user-replaceable CR2032
	Rain Gauge Tips
External Event type:	Relay contact closure or rain gauge “tips”
Connection	2 m (6 ft) cable with 2-wire input
Maximum input frequency	1 Hz (1 pulse per second)
	Temperature
Measurement range	-20° to 70°C (-4° to 158°F)
Accuracy	± 0.53°C from 0° to 50°C (± 0.95°F from 32° to 122°F); a solar radiation shield is required for temperature measurements in sunlight
Resolution	0.14°C at 25°C (0.25°F at 77°F)
Response time	Airflow of 2 m/s (4.4 mph): 10 minutes, typical to 90%
Sample rate	1 second to 18 hours, user-selectable
Dimensions	7.1 x 3.3 x 2.3 cm (2.8 x 1.3 x 0.9 in) Cable 1.8 m (6 ft)
CE compliant	Yes

*HOBO Base Station or HOBO Waterproof Shuttle required. See pages 43-44 for more details.

HOBO Pendant® G

Measures acceleration, tilt, and motion

Measure 3-dimensional motion, such as sports activity or medical therapy compliance with the HOBO Pendant G data logger. With this logger, users can measure acceleration and angular displacement in 1, 2 or 3 axes. Use this data to monitor activity and improve performance.

Supported Measurements: Acceleration, Tilt, Motion

Key Advantages:

- Low-cost acceleration and tilt measurement
- Waterproof housing for wet or underwater use
- Data readout in less than 30 seconds via fast Optic USB interface

Minimum System Requirements:

Software
See pg 33

Base Station*
See pg 44

Price	$83
Memory	64K bytes (approximately 21.8K combined x-, y-, and z-axis readings or events)
Battery life	1 year typical, user-replaceable, CR2032
Resolution	0.025 g; 0.245 m/s² (0.8 ft/s²)
Logging interval	1 second to 18 hours, 12minutes, 15 seconds in Normal mode 0.01 seconds (100 Hz) to 0.99 seconds (1.01 Hz) in Fast mode
Time accuracy	±1 minute per month at 25°C (77°F)
Operating range	In water/ice: -20° to 50°C (-4° to 122°F) In air: -20° to 70°C (-4° to 158°F)
Water depth rating	30 m from -20° to 20°C (100 ft from -4° to 68°F)
Dimensions	5.8 x 3.3 x 2.3 cm (2.3 x 1.3 x 0.9 in)
CE compliant	Yes

*HOBO Base Station or HOBO Waterproof Shuttle required. See pages 43-44 for more details.

HOBO U30 Weather Station

Research-grade weather monitoring with plug-and-play convenience

HOBO U30 Weather Stations save you time and money by offering plug-and-play convenience and research-grade performance.

Key Advantages:

- Web-based and USB options available
- Plug-and-play Smart Sensors enable rapid deployment
- Double weatherproof, tamperproof enclosure designed for use in harsh environments
- Alarm capabilities via text, email
- Optional analog inputs with configurable sensor power
- Options for battery, solar, or AC power with battery backup

Supported Measurements: Temperature, Relative Humidity, Dew Point, Solar Radiation, PAR, Rainfall, Wind Speed, Wind Direction, Soil Moisture, Barometric Pressure, Leaf Wetness, 4-20mA, Voltage Input, Pulse Input

Minimum System Requirements:

Software
See pg 33

Data plan*

Power source[1]

Sensor
See pg 37

2 Meter Tripod

$61 M-TPB

- Height range: 1.72 to 2.13 m (5.6 to 7 ft)
- Mast diameter: 4.1 cm (1.63 in)
- Weight: 5.8 kg (12.8 lbs)

M-GKA Grounding Kit is recommended when using tripods in exposed locations.
2 Meter Tripod Kit also available M-TPB-KIT $200

3 Meter Tripod

$165 M-TPA (shown at right)

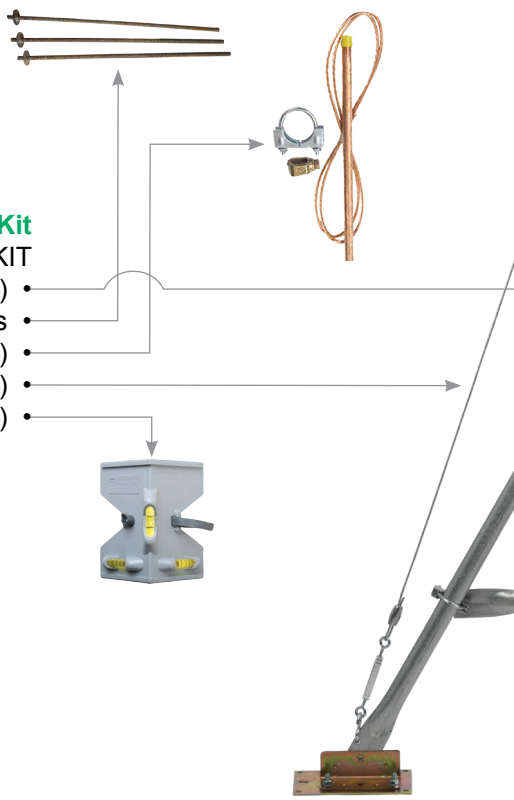
- Height range: 2.74 to 3.20 m (9 to 10.5 ft)
- Mast diameter: 4.1 cm (1.63 in)
- Weight: 12.7 kg (28 lbs)
- Maximum slope: 13 degrees for installation on moderately uneven ground

M-GKA Grounding Kit is recommended when using tripods in exposed locations.

3 Meter Tripod Kit

$292 M-TPA-KIT

- 3-meter tripod (M-TPA)
- 1/2-in Stake Kit (M-SKA) for guy wires
- Grounding Kit (M-GKA)
- Guy Wire Kit (M-GWA)
- Mast Level (M-MLA)



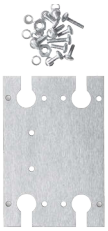
*A complete U30 remote monitoring system requires a data plan (U30-NRC is data logger only and does not require a data plan).
[1]AC power adapter or solar panel required. See pages 38 & 42. For more details, please visit onsetcomp.com, or call us at 1-800-564-4377.

HOBO U30 Weather Station

Light Sensor Bracket
$32 M-LBB
Includes leveling screws and u-bolts for mast mounting.

Solar Radiation Shield
$65 RS3
Pre-assembled for S-THBs, S-TMBs, includes clamp for mast mounting.

Full Cross Arm
$72 M-CAA
91.5 cm (36 in)
For use with Onset tripods or masts, the full cross arm assures unobstructed wind measurement.



NDVI Light Sensor Bracket
$20 M-NDVI
Used to mount 2 PAR sensors and 2 solar radiation sensors for making NDVI measurements. Also requires M-LBB light sensor bracket.

Light Sensor Level
$39 M-LLA
Purchase one for use on any number of light sensors.

Smart Sensor Extension Cables
$20-$45 S-EXT-M0xx
2 m, 5 m, 10 m, 25 m (16 ft, 33 ft, 82 ft) cable lengths available. Use individually or connected together to optimize sensor placement. A weatherproof housing is required for outdoor connections (Part# S-EXT-CASE2 $30). Network cable length limited to 100 meters per data logger.

HOBO Micro Station

4-channel weatherproof station for monitoring outdoor environmental conditions

The HOBO Micro Station offers reliable monitoring performance at industry-leading prices. Designed for stand-alone data logging applications, the 4-channel HOBO Micro Station accepts Onset's full suite of plug-and-play Smart Sensors, and is battery-powered for up to one year.

Supported Measurements: Temperature, Relative Humidity, Dew Point, Wind Speed, Wind Direction, Rainfall, Soil Moisture, Solar Radiation, PAR, Barometric Pressure, Leaf Wetness, 4-20mA, Voltage Input, Pulse Input, Light Intensity

Key Advantages:

- Improved weatherproof enclosure for harsh environments
- Compact and low cost, with 4 sensor inputs
- Up to 2 DC voltage or 4-20mA input adapters

Minimum System Requirements:

Software
See pg 33

Interface Cable*

Sensor
See pg 37

Part number	H21-002
Price	$231
Memory	512K non-volatile flash data storage
Operating Range	-20° to 50°C (-4° to 122°F) with alkaline batteries, -40° to 70°C (-40° to 158°F) with lithium batteries
Sensor Inputs	Up to four Smart Sensors (including multiple-parameter sensors)
Communication	RS-232 via 3.5 mm serial port
Logging Interval	1 second to 18 hours, user-specified interval
Time Accuracy	0 to 2 seconds for the first data point and ± 5 seconds per week at 25°C (77°F)
Battery Life	1 year typical, up to 10 sensors w/10 minute or longer logging interval, 4 AA alkaline batteries (included)
Dimensions	8.9 cm H x 11.4 cm D x 5.4 cm W (3.5 x 4.5 x 2.125 in)
CE Compliant	Yes

*USB interface cable. See page 41

Data Logging Systems Comparison

Comparison Chart

	HOBO Micro Station	HOBO U30 Web-based System			HOBO U30 NRC	HOBO Energy Logger
		GSM	Wi-Fi	Ethernet		
	H21-002 See pg 23	U30-GSM See pg 15, 21	U30-WIF See pg 15, 21	U30-ETH See pg 15, 21	U30-NRC See pg 13, 15	H22-001 See pg 16
Price	$231	$850	$789	$694	$418	$331
Remote Communications	No	Yes	Yes	Yes	No	No
Internet access to real-time data	No	Yes	Yes	Yes	No	No
Enclosure	Weatherproof	Double weatherproof tamperproof	Double weatherproof tamperproof	Double weatherproof tamperproof	Double weatherproof tamperproof	Indoor
Fully-Integrated, expandable communications	No	Yes	Yes	Yes	No	No
***Solar or AC power with rechargeable batteries**	No	Yes*	Yes*	Yes*	Yes*	AC power option
Optional analog inputs with configurable sensor power	No	2	2	2	2	6
Smart Sensor compatible	Yes	Yes	Yes	Yes	Yes	Yes
Number of inputs	4	5 Expandable to 15	5 Expandable to 15	5 Expandable to 15	5 Expandable to 15	3 module ports and 6 sensor inputs
USB connectivity	Requires adapter	Yes	Yes	Yes	Yes	Requires adapter
Operating range	- 20° to 50°C standard - 40° to 70°C with optional Lithium batteries	- 20° to 40°C normal operation - 40° to 60°C extended range (limitations)	-20° to 40°C normal operation - 40° to 60°C extended range (limitations)	- 20° to 40°C normal operation - 40° to 60°C extended range (limitations)	- 20° to 40°C normal operation - 40° to 60°C extended range (limitations)	- 20° to 50°C standard - 40° to 70°C with optional Lithium batteries
Battery life without solar or AC power	1 year typical (4 AA)	30 days (1hr connection interval)	30 days (1hr connection interval)	30 days (1hr connection interval)	6 months typical	1 year typical (8 AA)
Data storage memory	512k	Unlimited in HOBOlink	Unlimited in HOBOlink	Unlimited in HOBOlink	512k	512k
CE Compliant	Yes					

* Solar panel or AC adapter sold separately

TidbiT® v2 Temp Logger

Small, durable logger for measuring water temperature

Onset's smallest data logger, the TidbiT v2, has 12-bit resolution and a precision sensor for ±0.2°C accuracy over a wide temperature range. It is waterproof to 300 meters (1,000 feet) and can be used in a wide range of water temperature monitoring applications.

Supported Measurements: Temperature

Key Advantages:

- Onset's smallest temperature logger
- Waterproof to 300 meters (1,000 feet)
- Data readout in less than 30 seconds via fast optic USB interface

Minimum System Requirements:

Software
See pg 33

Base Station*
See pg 43

Coupler[1]

Part number	UTBI-001
Price	$133
	Temperature Sensor
Operation range	-20° to 70°C (-4° to 158°F) in air; maximum sustained temperature of 30°C (86°F) in water**
Accuracy	± 0.21°C over 0° to 50°C (± 0.38°F over 32° to 122°F)
Resolution	0.02°C at 25°C (0.04°F at 77°F)
Response time	5 minutes in water; 12 minutes in air moving 2 m/sec; 20 minutes in air moving 1 m/sec (typical to 90%)
Stability (drift)	0.1°C (0.18°F) per year
	Logger
Real-time clock	± 1 minute per month 0° to 50°C (32° to 122°F)
Battery	3 Volt lithium, non-replaceable
Battery life	5 years with 1 minute or greater logging interval
Memory	42,000 measurements
Waterproof	To 305 m (1,000 ft)
Dimensions	3.0 × 4.1 × 1.7 cm (1.2 × 1.6 × 0.68 in); mounting bail 4.6 mm (3/16 in) diameter hole
CE compliant	Yes

*HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[1]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.
**To guarantee accuracy, the TidbiT v2 Temp must not be used in condensing environments and water temperatures higher than 30°C (86°F) for more than eight cumulative weeks over the life of the logger. Frequent or prolonged exposure will lead to measurement drift and eventual failure.

HOBO Water Temp Pro v2 Logger

Affordable temperature monitoring for fresh or salt water

The HOBO Water Temp Pro v2 data logger features 12-bit resolution and a precision sensor for ±0.2°C accuracy over a wide temperature range. Designed with a durable streamlined case for extended deployment in fresh or salt water, the Water Temp Pro v2 is equipped with an Optic USB interface for data offload in the field, even when the data logger is wet.

Supported Measurements: Temperature

Key Advantages:

- Research-grade measurements at an affordable price
- Waterproof to 120 meters (400 feet)
- Data readout in less than 30 seconds via fast Optic USB interface

Minimum System Requirements:

Software See pg 33
Base Station* See pg 43
Coupler[1]

Part number	U22-001
Price	$129
Memory	42,000 measurements
Logging interval	1 second to 18 hours, fixed - or multiple-rate up to 8 user-defined sampling intervals
Battery life	6 years with 1 minute or greater logging interval, factory-replaceable ONLY
Measurement range	-40° to 70°C (-40° to 158°F) in air; maximum sustained temperature of 50°C (122°F) in water
Accuracy	± 0.21°C over 0° to 50°C (± 0.38°F over 32° to 122°F)
Resolution	0.02°C at 25°C (0.04°F at 77°F)
Response time	(90%) 5 minutes in water; 12 minutes in air moving 2 m/sec (typical)
Dimensions	3.0 cm (1.19 in) maximum diameter, 11.4 cm (4.5 in) length; mounting hole 6.3 mm (0.25 in) dia
CE compliant	Yes

*HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[1]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

HOBO Pendant Loggers

Low-cost data logging solution for temperature, light, and more

HOBO Pendant data loggers are economical, weatherproof, and waterproof temperature data loggers designed for a variety of short- and long-term monitoring applications.

Supported Measurements: Temperature, Light Intensity, Tilt, Acceleration

Key Advantages:

- Low-cost temperature, light intensity, and acceleration loggers
- Waterproof housing for wet or underwater use
- Data readout in less than 30 seconds via fast Optic USB interface

Minimum System Requirements:

Software
See pg 33

Base Station*
See pg 44

Part number	UA-001-08	UA-001-64	UA-002-08	UA-002-64	UA-004-64[1]
Price	$42	$59	$47	$64	$83
Memory (measurements)	6,500 temp	52,000 temp	3,500 temp & light	28,000 temp & light	64,000 accel 32,000 tilt 21,333 motion
Sample rate	1 second to 18 hours, user-selectable				100 per second
Battery life	1 year typical, user-replaceable, CR2032				
Water Depth Rating	30 m from -20 to 20°C (100 ft from -4° to 68°F)				
	Temperature				
Measurement range	-20° to 70°C (-4° to 158°F) in air, -20° to 50°C (-4° to 122°F) in water				
Accuracy	± 0.53°C from 0° to 50°C (± 0.95°F from 32° to 122°F)				
Resolution (10-bit)	0.14°C @ 25°C (0.25°F @ 77°F)				
Response time	10 minutes (to 90% in airflow of 2 m/s), 5 minutes (to 90% in water)				
	Light intensity				
Range	0-323,000 lumens/m2 [0-30,000 foot candles (lumens/ft2)]				
	Acceleration				
Measurement range	± 3 G				
Accuracy	±2.5% FS @ 25°C (77°F)—Factory-calibrated				
Resolution (8-bit)	0.02 G				
	Tilt/Motion				
Measurement range	± 3 G				
Accuracy	±2.5% FS @ 25°C (77°F)—Factory-calibrated				
Resolution (8-bit)	±4.3° @ 90° to ±13° @ 0° and 180°				
Dimensions	5.8 x 3.3 x 2.3 cm (2.3 x 1.3 x 0.9 in)				
CE compliant	Yes				

*HOBO Base Station or HOBO Waterproof Shuttle required. See pages 43-44 for more details.
[1]For more details, see page 20

HOBO U12 Deep Ocean Temp Logger

Water temperature monitoring in extreme ocean environments

The HOBO U12 Deep Ocean Temperature data logger is designed to track water temperatures in the most extreme ocean environments. Built with a virtually indestructible titanium housing, the logger can withstand corrosive salt water and exposure to extreme temperature and pressure at depths of up to 11,000 meters.

Supported Measurements: Temperature

Key Advantages:

- Withstands depths up to 11,000 meters (36,080 feet)
- Extended temperature range: -40° to 125°C
- Fast readout via direct USB interface
- Titanium housing for use in saltwater

Minimum System Requirements:

Software
USB cable*

See pg 33

Part number	U12-015-03
Price	$799
Memory	43,000 measurements
Sample rate	1 second to 18 hours, user-selectable
Battery life	3 years typical, factory-replaceable
Measurement range	Logging: -40° to 125°C (-40° to 257°F) Launch/Readout: 0° to 50°C (32° to 122°F), per USB specification
Accuracy	± 0.25°C from 0° to 50°C (± 0.45°F from 32° to 122°F)
Resolution (12 bit)	0.02°@ 25°C (0.04°@ 77°F)
Response time	<4 minutes (to 90% in water)
Dimensions	114 x 20.6 mm diameter (4.5 x 0.81 in diameter) 6.4 mm (0.25 in) mounting hole
CE compliant	Yes

*USB cable included with software

HOBO Water Level Loggers

Accurate, affordable water level monitoring

HOBO Water Level data loggers offer high accuracy at an affordable price, with no cumbersome vent tubes or desiccants to maintain. These data loggers are ideal for recording water levels and temperatures in wells, streams, lakes, wetlands and tidal estuaries.

Supported Measurements: Water Level, Barometric Pressure, Pressure (Absolute), Temperature

Key Advantages:

- Available in 4 depth ranges
- No-vent-tube design for easy and reliable deployment
- Available in stainless steel and titanium* versions
- Durable ceramic pressure sensor for reliable performance
- Calibration certificate included

Minimum System Requirements:

Software
See pg 33

Base Station[1]
See pg 43

Coupler[2]

Water Level Logger Kits:

Deluxe Kit includes a carrying case, two HOBO Water Level Loggers (one 13 foot for barometric pressure and one 13 foot, 30 foot, or 100 foot), HOBOware Pro software, and a HOBO Waterproof Data Shuttle with coupler. The Starter Kit includes a HOBO Water Level Logger, HOBOware Pro Software, and an Optic USB Base Station. Available in 13 foot, 30 foot, and 100 foot depths.

Deluxe Kit

Starter Kit

Part number	U20-001-04/ U20-001-04-Ti	U20-001-01/ U20-001-01-Ti	U20-001-02/ U20-001-02-Ti	U20-001-03/ U20-001-03-Ti
Price	$495/$595			
	HOBO Water Level Specifications			
Range	0-4 m (0-13 ft) 0-145 kPa (0-21 psia)	0-9 m (0-30 ft) 0-207 kPa (0-30 psia)	0-30 m (0-100 ft) 0-400 kPa (0-58 psia)	0-76 m (0-250 ft) 0-850 kPa (0-123 psia)
Factory Calibrated Range (0° to 40°C; 32° to 104°F)	69 to 145 kPa (10-21 psia)	69 to 207 kPa (10-30 psia)	69 to 400 kPa (10-58 psia)	69 to 850 kPa (10-123 psia)
Water Level Accuracy (Typical Error)	± 0.3 cm (0.01 ft) (± 0.075% FS)	± 0.5 cm (0.015 ft) (± 0.05% FS)	± 1.5 cm (0.05 ft) (± 0.05% FS)	± 3.8 cm (0.125 ft) (± 0.05% FS)
Resolution	0.14 cm (0.005 ft)	0.21 cm (0.007 ft)	0.41 cm (0.013 ft)	0.87 cm (0.028 ft)
Burst Pressure	310 kPa (45 psia) 18 m (60 ft) depth		500 kPa (72.5 psia) 40.8 m (134 ft) depth	1200 kPa (174 psia) 112 m (368 ft) depth
	Temperature Specifications (all models)			
Range	-20° to 50°C (-4° to 122°F)			
Accuracy	± 0.37° @ 20°C (± 0.67° @ 68°F) ± 0.44° from 0° to 50°C (± 0.79° from 32° to 122°F)			
Resolution (10 bit)	0.1° @ 20°C (0.18° @ 68°F)			
Response time	5 minutes (to 90% in water)			
Dimensions	2.46 cm diameter x 15 cm (0.97 x 5.9 in) hole in mounting bail 6.3 mm (0.25 in)			
CE compliant	Yes			

*Titanium version recommended for saltwater deployment.
[1]HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[2]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

NEW! HOBO Water Level Loggers

A new standard for price/performance

HOBO U20L Series Water Level loggers set a new standard for price/performance for accurate water level and temperature monitoring. Priced at just $299, the loggers combine 0.1% measurement accuracy, a polypropylene housing for use in both fresh and salt water, and a non-vented design for convenient and hassle-free deployment.

Supported Measurements: Water Level, Barometric Pressure, Pressure (Absolute), Temperature

Key Advantages:

- Self-contained, non-vented design enables easy deployment
- Ideal for use in both fresh and saltwater environments
- Durable ceramic pressure sensor
- Ideal for use in wells, streams, lakes, wetlands and tidal areas

Minimum System Requirements:

Software
See pg 33

Base Station[1]
See pg 43

Coupler[2]

Part number	U20L-04	U20L-01	U20L-02
Price	$299	$299	$299
	HOBO Water Level Specifications		
Range	0-4 m (0-13 ft) 0 to 145 kPa (0 to 21 psia)	0-9 m (0-30 ft) 0 to 207 kPa (0 to 30 psia)	0-30.6 m (0-100 ft) 0 to 400 kPa (0 to 58 psia)
Factory Calibrated Range (0° to 40°C; 32° to 104°F)	69 to 145 kPa (10 to 21 psia)	69 to 207 kPa (10-30 psia)	69 to 400 kPa (10 to 58 psia)
Water Level Accuracy (Typical Error)	± 0.4 cm (0.013 ft) (± 0.1% FS)	± 1.0 cm (0.03 ft) (± 0.1% FS)	± 3.0 cm (0.1 ft) (± 0.1% FS)
Resolution	0.14 cm (0.005 ft) water	0.21 cm (0.007 ft) water	0.41 cm (0.013 ft) water
Burst Pressure	310 kPa (45 psia) 18 m (60 ft) depth	310 kPa (45 psia) 18 m (60 ft) depth	500 kPa (72.5 psia) 40.8 m (134 ft) depth
	Temperature Specifications (all models)		
Range	-20° to 50°C (-4° to 122°F)		
Accuracy	± 0.37° @ 20°C (± 0.67° @ 68°F)	± 0.44° from 0° to 50°C (± 0.79° from 32° to 122°F)	
Resolution (10 bit)	0.1° @ 20°C (0.18° @ 68°F)		
Response time	10 minutes (to 90% in water)		
Dimensions	3.18 cm diameter x 15.24 cm (1.25 x 6.0 in) hole in mounting bail 6.3 mm (0.25 in)		
CE compliant	Yes		

[1]HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[2]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

HOBO Conductivity Loggers

Conductivity monitoring for freshwater and stable saltwater applications

HOBO Conductivity Loggers are convenient, rugged, and cost-effective data loggers for a variety of freshwater and saltwater monitoring applications.

The HOBO U24-001 model provides high-accuracy conductivity data in freshwater environments, for applications such as environmental impact monitoring, stormwater management, and water quality studies.

The HOBO U24-002-C model is for saltwater environments with relatively small changes in salinity (±5,000 µS/cm) such as saltwater bays, or to detect salinity events such as upwelling, rainstorm, and discharge events. This logger can also be used to gather salinity data for salinity compensation of HOBO U26 Dissolved Oxygen logger data. **Note:** This logger is not intended for monitoring salinity levels in waters with widely changing salinities as it can have significant measurement error and drift in those environments.

Supported Measurements: Conductivity, Salinity, Temperature

Minimum System Requirements:

Software
See pg 33

Base Station*
See pg 43

Coupler[1]

Key Advantages:

- Non-contact capacitive sensor provides long life
- Easy access to sensor for cleaning and shedding air bubbles
- HOBOware Pro software provides compensation for fouling using calibration points from the start and end of each deployment
- Optical interface provides high-speed, reliable data offload in wet environments
- Compatible with HOBO Waterproof Shuttle for easy and reliable data retrieval

Part number	**U24-001** Conductivity	**U24-002-C** Conductivity/Salinity
Price	$750	$750
Memory	18,500 temperature and conductivity measurements when using one conductivity range; 14,400 sets of measurements when using both conductivity ranges (64 kbytes)	
Conductivity Calibrated Measurement Ranges	Low Range: 0 to 1,000 µS/cm Full Range: 0 to 10,000 µS/cm	Low Range: 100 to 10,000 µS/cm High Range: 5,000 to 55,000 µS/cm
Conductivity Calibrated Range – Temperature Range	5° to 35°C (41° to 95°F)	
Specific Conductance Accuracy (in Calibrated Range using Conductivity Assistant and Calibration Measurements)	Low Range: 3% of reading, or 5 µS/cm Full Range: 3% of reading, or 20 µS/cm, whichever is greater	Low Range: 3% of reading or 50 µS/cm, whichever is greater High Range: 5% of reading, in waters within a range of ±3,000 µS/cm; waters with greater variation can have substantially greater error
Conductivity Resolution (typical)	1 µS/cm	2 µS/cm
Conductivity Drift	Less than 3% sensor drift per year	Up to 12% sensor drift per month. Use monthly start & end-point calibration to compensate
Temperature Accuracy (in Calibrated Range)	0.1°C (0.2°F)	
Temperature Resolution	0.01°C (0.02°F)	
Response Time	1 second to 90% of change (in water)	
Measurement and Operating Range	0° to 36°C (32° to 97°F) -non-freezing	-2° to 36°C (28° to 97°F) -non-freezing
Sample rate	1 second to 18 hrs, fixed or multiple-rate sampling with up to 8 user-defined sampling intervals	
Time Accuracy	± 1 minute per month	
Battery	3.6 Volt lithium battery, life: 3 years (at 1 minute logging), typical	
Maximum Depth	70 m (225 ft)	
Dimensions	3.18 cm diameter x 16.5 cm, with 6.3 mm mounting hole (1.25 in diameter x 6.5”, ¼ in hole)	
CE compliant	Yes	

*HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[1]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

HOBO Dissolved Oxygen Logger

Affordable, high-performance dissolved oxygen monitoring

The HOBO U26 Dissolved Oxygen Logger measures concentrations of dissolved oxygen in lakes, streams, rivers, estuaries, and coastal waters. Used by aquatic biologists, hydrologists, and other research professionals to monitor water quality, the U26 is ideal for climate change and environmental impact studies as well as ecological and oceanographic research.

The HOBO U26 combines the high-accuracy, robust performance of industry-leading RDO® Basic (Rugged Dissolved Oxygen) sensor technology with an easy-to-maintain design, all at a fraction of the cost of other monitoring options.

Supported Measurements: Dissolved Oxygen, Temperature

Key Advantages:

- Affordable, high performance DO monitoring with 0.2 mg/L accuracy
- Optical DO sensor technology for long-lasting calibration, less maintenance
- Software corrects for measurement drift from fouling; provides salinity-adjusted DO concentration and percent saturation (Salinity adjustment requires salinity meter reading or data logger file. Percent saturation requires barometric pressure data file.)
- Optic USB interface for high-speed, reliable data offload
- Easy-to-replace DO sensor cap lasts six months

Minimum System Requirements:

Software See pg 33
Base Station* See pg 43
Coupler[1]

Part number	U26-001
Price	$1250
	Dissolved Oxygen
Sensor Type	Optical
Measurement Range	0 to 30 mg/L
Calibrated Range	0 to 20 mg/L; 0 to 35°C (32 to 95°F)
Accuracy	0.2 mg/L up to 8 mg/L; 0.5 mg/L from 8 to 20 mg/L
Resolution	0.02 mg/L
Response time	To 90% in less than 2 minutes
DO Sensor Cap Life	6 months (cap expires 7 months after initialization)
	Temperature
Operating Temperature and Measurement Range	-5 to 40°C (23 to 104°F), non-freezing
Temperature Accuracy	0.2°C (0.36°F)
Temperature Resolution	± 0.02°C (± 0.04°F)
Response Time	To 90% in less than 30 minutes
	Logger
Memory	21,700 sets of DO and temperature measurements
Logging Rate	1 minute to 18 hours
Time Accuracy	± 1 minute per month at 25°C (77°F)
Battery	3.6 V lithium battery; factory replaceable, life: 3 years (at 1 minute logging)
Maximum Depth	100 m (328 ft)
Dimensions	39.6 mm diameter x 266.7 mm (1.56 in diameter x 10.5 in)
CE Compliant	Yes

*HOBO Base Station or HOBO Waterproof Shuttle required. See page 43 for more details.
[1]Coupler included with HOBO Base Station or HOBO Waterproof Shuttle.

HOBOware / HOBOware Pro

Graphing and Analysis Software

HOBOware is Onset's flagship setup, graphing and analysis software package for HOBO data loggers. It allows you to view, graph, and analyze data with point-and-click simplicity. You can easily set up your application in a matter of minutes, quickly read out and plot data, and export to spreadsheets for further analysis.

Standard Features:

- Simple menus for fast, easy logger setup and readout
- Scaling to real-world engineering units
- Presentation-quality graphs
- Easy export of data files to text format
- Free download

HOBOware Pro Features:

- Time-saving tools for fast setup and readout
- Advanced plotting tools for more precise data analysis
- Access to Data Assistants for post-processing data

Or download your free 30-day trial of HOBOware Pro. From setup to analysis, no other data logger software can compare to the power and simplicity of HOBOware Pro.

HOBOware features comparison

	HOBOware	HOBOware Pro
Support for all HOBO data loggers	✓	✓
Quickly generate presentation-quality graphs	✓	✓
Copy & paste series	✓	✓
Merge data files	✓	✓
Save modified graphs as projects	✓	✓
Easy data export to XLS, CSV, & TXT files	✓	✓
Linear & Pulse Scaling Data Assistants	✓	✓
Time-saving tools for fast setup, readout & export		✓
Data assistants for post processing Dissolved Oxygen, Conductivity, Water Level, Growing Degree Days, Grains per Pound & kWh		✓
Ability to create pie charts		✓
Crop a series to a specific time frame		✓
Subset Statistics Tool for details within a time frame		✓
21 CFR Part11 Compliance		✓
Data Shuttle support		✓
HOBOnode manager to support ZW Data Nodes		✓
	Free Download	$99

System Requirements

- Windows: 8, 7 (Pro, Ultimate and Home Premium), XP (Pro and Home).
- Windows 7 Enterprise: Note: While HOBOware has been modified to work on Windows 7 Enterprise, there may be local configurations of that operating system that will not work with HOBOware.
- Mac: OS X Versions 10.7.x, 10.8.x and 10.9.x.
- Java Runtime Environment (JRE) 1.6 or 1.7 (32-bit or 64-bit on Windows). Please note that Windows 8 users needing serial logger support must have Java 7 (1.7.0_9) or greater. Please note that version 1.6, also known as Java 6, is officially supported on OS X only on Intel Core 2 Duo and later processors. See the time zone note below.
- One of the following Internet browsers: Safari 6, Microsoft Internet Explorer 10 and 11, as well as the most recent versions of Firefox and Google Chrome.
- Minimum screen resolution of 1024x768. Recommended screen resolution of 1280x800 or greater particularly for non-English users.
- 256+ colors
- 1.8 GHz single core CPU, 1GM RAM*

HOBOmobile

Easy Logger Setup and Data Management Software for HOBO MX Series Loggers

HOBOmobile is designed to communicate using a Bluetooth® Smart mobile phone or tablet to the HOBO MX1101 data logger. You can configure and start the data logger, download the recorded data, store and analyze the data. The HOBOmobile app is a free download available on the App Store. See pages 1-2 for more details.

Download on the App Store

Key Advantages:

- Communicate to HOBO MX data loggers using Bluetooth Smart
- Internet connection not required to use HOBOmobile
- Set data loggers name, password, logging rate, alarm threshold, start & stop time
- Configure & clear audible alarms
- Page the data logger
- Export and Share data as a CSV, TXT, XLSX and HOBO files

Measure and log temperature and relative humidity in sensitive environments

Warehouses and storage facilities

Data centers and high-tech environments

Museums, archives and libraries

Commercial office buildings

Manufacturing facilities and testing labs

Hospitals and labs

If temperature and humidity management are critical in your facility, do it faster and easier than ever with the new, Bluetooth Smart enabled HOBO MX1101 Data Logger.

Without connecting anything or even coming into physical contact with your data logger, you can set up the HOBO MX1101, check its status, page to locate it and read out your data to be shared. It's incredibly easy for anyone to use, and leverages the tools we all have in our back pockets and backpacks – our phones and tablets!

HOBOnode Manager

Powerful Network Management Software for HOBO ZW Series Data Loggers

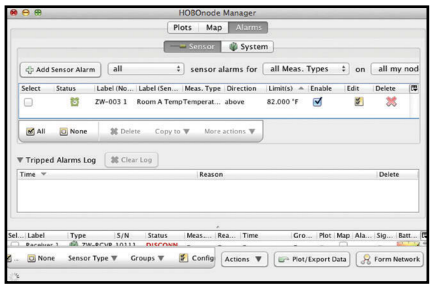
HOBOnode Manager, a component of HOBOware Pro, lets you view real-time energy and environmental data, receive alarm notifications, and manage and view your entire HOBO ZW wireless sensor network. It offers a range of convenient data access options and the ability to export your data to Microsoft Excel and other programs. See page 14 for more details.

Key Advantages:

- Easy network setup and monitoring
- Real-time graphing
- Easy alarm set up
- Network Map feature for visual representation of all nodes and network connections

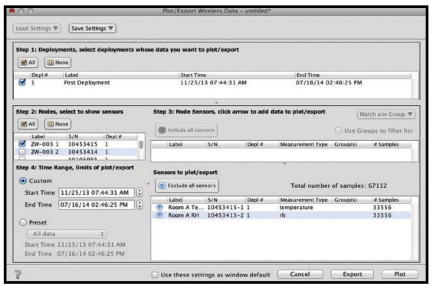
View Real-Time Plots

In the plots window, you can view up to 20 sensor data points in real-time, all at once.



Easy Alarm Setup

Easily configure both sensor and system alarms. Get notified via text message or email when conditions exceed set thresholds.



Automated Data Delivery

Get your data forwarded to FTP site or email address at regular intervals. Easy integration with third-party programs.

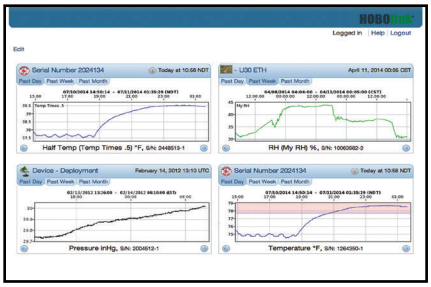
HOBOlink Web-Based Display/Readout

Powerful Web-based Access to HOBO U30 Remote Monitoring Systems

HOBOlink is a web-enabled software platform designed for HOBO U30 Remote Monitoring Systems. This data logger software allows you to easily access current and historical data, set alarm notifications and relay activations, and manage and control your HOBO U30 web-based data logging systems. See pages 15, 21 and 22 for more details.

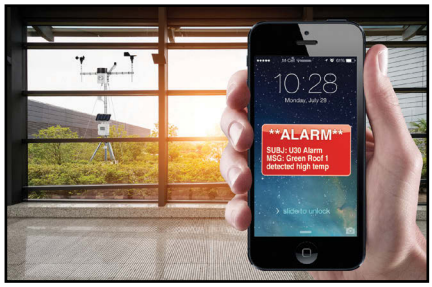
Key Advantages:

- Get 24/7 web access to your data
- Access your data in over 30 countries
- Customize your data display
- Verify U30 system status remotely
- Set up and manage alarm notifications over the web
- Schedule automated delivery of exported data files
- Analyze data faster with custom export capabilities



Customize your display

Create a single screen that displays key measurement data and trends for all of your HOBO U30 web-based systems.



Get notified

HOBOlink will send an email or a text message to your phone when conditions exceed set thresholds.

Get data automatically

Select multiple U30s and sensors, and configure HOBOlink to automatically deliver data on a schedule that you specify.

External Sensors by Measurement

Indoor Environmental

Temperature

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-THB-M002[1]	12-bit Temp/RH smart (2m cable)	$189	√	√	√		√				
S-THB-M008[1]	12-bit Temp/RH smart (8m cable)	$195	√	√	√		√				
S-TMB-M002[1]	12-bit Temp/RH smart (2m cable)	$95	√	√	√		√				
S-TMB-M006[1]	12-bit Temp smart (6m cable)	$105	√	√	√		√				
S-TMB-M017[1]	12-bit Temp smart (17m cable)	$120	√	√	√		√				
TC6-J	Type J beaded thermocouple	$19								√	√
TC6-K	Type K beaded thermocouple	$19								√	√
TC6-T	Type T beaded thermocouple	$19								√	√
TCP6-K12	Type K Probe thermocouple	$47								√	√
TMC1-HD	Air/Water/Soil Temp (1' cable)	$35				√		√			√
TMC6-HD	Air/Water/Soil Temp (6' cable)	$39				√		√			√
TMC20-HD	Air/Water/Soil Temp (20' cable)	$44				√		√			√
TMC50-HD	Air/Water/Soil Temp (50' cable)	$50				√		√			√
TMC6-HC	Stainless steel Temp probe (6' cable)	$87				√		√			√
TMC6-HE	Pipe Temp (6' cable)	$39				√		√			√

Relative Humidity

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-THB-M002[1]	12-bit Temp/RH smart (2m cable)	$189	√	√	√		√				
S-THB-M008[1]	12-bit Temp/RH smart (8m cable)	$195	√	√	√		√				

Carbon Dioxide

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
TEL-7001[1]	Telaire 7001 CO2	$465	√		√	√		√			√

Air Velocity

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-DCI-F900-L-O	Air Velocity – 5 m/s long	$375	√		√	√		√			√
T-DCI-F900-L-P	Air Velocity – 10 m/s long	$375	√		√	√		√			√
T-DCI-F900-S-O	Air Velocity – 5 m/s std	$280	√		√	√		√			√
T-DCI-F900-S-P	Air Velocity – 10 m/s std	$280	√		√	√		√			√

Volatile Organic Compound

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-ION-TVOC	Volatile Organic Compound	$2,995	√		√	√		√			√

Differential Pressure

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-VER-PXU-L[1]	Differential pressure transducer	$220	√		√	√		√			√
T-VER-PXU-X[1]	Differential pressure transducer	$195	√		√	√		√			√

Compressed Air Flow

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-CDI-5200-10S[1]	Compressed Air Flow Meter	$495	√		√	√		√			√
T-CDI-5200-20S[1]	Compressed Air Flow Meter	$629	√		√	√		√			√

[1] CE Compliant

External Sensors by Measurement

Gauge Pressure

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-ASH-G2-100[1]	Ashcroft gauge pressure	$190	√		√	√		√			√
T-ASH-G2-200[1]	Ashcroft gauge pressure	$190	√		√	√		√			√
T-ASH-G2-500[1]	Ashcroft gauge pressure	$190	√		√	√		√			√

Energy/Power

kW & kWh

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-VER-E50B2[1]	Power & Energy meter	$599	√	√	√			√			√
T-WNB-3D-240[1]	WattNode 208/240 VAC 3-phase	$269	√	√	√			√	√		√
T-WNB-3D-480[1]	WattNode 480 VAC 3-phase	$269	√	√	√			√	√		√
T-WNB-3Y-208-P[1]	WattNode 208-240VAC 2 or 3 Branch	$249	√	√	√			√			√
T-WNB-3Y-208[1]	WattNode 208/240 VAC 1,2, or 3-Phase	$229	√	√	√			√	√		√
T-VER-8044-100	Veris 480 V, 100 Amp Kilowatt transducer	$815	√		√	√		√			√
T-VER-8051-300	Veris kWh transducer 1-Phase, 300 Amp	$642	√	√	√			√	√		√
T-VER-8053-800	Veris kWh transducer 3-Phase, 800 Amp	$849	√	√	√			√	√		√

AC & DC Current

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
CTV-A[1]	2 - 20 Amp split-core AC current sensor	$90				√		√			√
CTV-B[1]	5 - 50 Amp split-core AC current sensor	$90				√		√			√
CTV-C[1]	10 - 100 Amp split-core AC current sensor	$90				√		√			√
CTV-D[1]	20 - 200 Amp split-core AC current sensor	$115				√		√			√
CTV-E[1]	60 - 600 Amp split-core AC current sensor	$115				√		√			√
T-MAG-0400-05[1]	0.5 - 5 AMP split-core AC transformer	$35	√		√						
T-MAG-0400-20[1]	2 - 20 AMP split-core AC transformer	$35	√		√						
T-MAG-0400-50[1]	5 - 50 AMP split-core AC transformer	$35	√		√						
T-MAG-0400-75[1]	7.5 - 75 AMP split-core AC transformer	$35	√		√						
T-ACT-0750-020[1]	0.2 - 20 Amp split-core AC transformer	$45	√		√						
T-ACT-0750-050[1]	0.5 - 50 Amp split-core AC transformer	$45	√		√						
T-ACT-0750-100[1]	1 - 100 Amp split-core AC transformer	$45	√		√						
T-ACT-0750-250[1]	2.5 - 250 Amp split-core AC transformer	$45	√		√						
T-MAG-SCT-100[1]	10 - 100 Amp split-core AC transformer	$55	√		√						
T-MAG-SCT-200[1]	20 - 200 Amp split-core AC transformer	$55	√		√						
T-MAG-SCT-600[1]	60 - 600 Amp split-core AC transformer	$65	√		√						
T-VER-971BP-200[1]	Split-Core Bi-Polar DC transducer	$229	√		√	√		√			√
T-VER-H970-200[1]	Split-Core 200A DC transducer	$205	√		√	√		√			√

AC & DC Voltage

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-MAG-SPT-150	150 Volt AC potential transformer	$79	√		√						
T-MAG-SPT-300	300 Volt AC potential transformer	$79	√		√						
T-MAG-SPT-600	600 Volt AC potential transformer	$79	√		√						
T-CON-ACT-150	ConLab 0-150 Volt AC transmitter	$139				√		√			√
T-CON-ACT-300	ConLab 0-300 Volt AC transmitter	$139				√		√			√
S-VIA-CM14[1]	12-bit voltage input adapter	$79	√	√	√						
CABLE-ADAP5	Voltage input cable 0-5 VDC	$12				√		√			√
CABLE-ADAP10	Voltage input cable 0-10 VDC	$12				√		√			√
CABLE-ADAP24	Voltage input cable 0-24 VDC	$12									√
CABLE-4-20MA	Measures currents from 0 to 20.1 mA	$25									√
CABLE-2.5-STEREO	Voltage input cable 0-2.5 VDC	$10				√		√	√		√
S-FS-CVIA[1]	FlexSmart analog module (2 channels)	$89			√						

[1] CE Compliant

External Sensors by Measurement

Energy/Power (continued)

Amp Hour, Amps, Power Factor, Volt-Amp Reactive, Volt-Amp Reactive Hour, Volt Amps, Volts, Watt Hours, Watts

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
T-VER-E50B2[1]	Power & Energy meter	$599	√	√	√			√			√

Pulse

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-UCC-M001[1]	Electronic switch pulse input adapter - 1M	$74	√	√	√						
S-UCC-M006[1]	Electronic switch pulse input adapter - 6M	$79	√	√	√						
S-UCD-M001[1]	Contact closure pulse input adapter - 1M	$74	√	√	√						
S-UCD-M006[1]	Contact closure pulse input adapter - 6M	$79	√	√	√						
CABLE-2.5-STEREO	Voltage input cable 0-2.5 VDC	$10						√	√		♦

Time-of-Use

Motor On/Off

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
CSV-A8[1]	AC current switch	$89							√		√

Water

Water Temperature

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-TMB-M002[1]	12-bit Temp/RH smart (2m cable)	$95	√	√	♦		♦				
S-TMB-M006[1]	12-bit Temp smart (6m cable)	$105	√	√	♦		♦				
S-TMB-M017[1]	12-bit Temp smart (17m cable)	$120	√	√	♦		♦				
TMC1-HD	Air/Water/Soil Temp (1' cable)	$35				√		√			♦
TMC6-HD	Air/Water/Soil Temp (6' cable)	$39				√		√			♦
TMC20-HD	Air/Water/Soil Temp (20' cable)	$44				√		√			♦
TMC50-HD	Air/Water/Soil Temp (50' cable)	$50				√		√			♦

Weather/Field

Temperature

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-THB-M002[1]	12-bit Temp/RH smart (2m cable)	$189	√	√	♦		♦				
S-THB-M008[1]	12-bit Temp/RH smart (8m cable)	$195	√	√	♦		♦				
S-TMB-M002[1]	12-bit Temp/RH smart (2m cable)	$95	√	√	♦		♦				
S-TMB-M006[1]	12-bit Temp smart (6m cable)	$105	√	√	♦		♦				
S-TMB-M017[1]	12-bit Temp smart (17m cable)	$120	√	√	♦		♦				
TC6-J	Type J beaded thermocouple	$19								√*	♦
TC6-K	Type K beaded thermocouple	$19								√*	♦
TC6-T	Type T beaded thermocouple	$19								√*	♦
TCP6-K12	Type K probe thermocouple	$47								√*	♦
TMC1-HD	Air/Water/Soil Temp (1' cable)	$35				√		♦			♦
TMC6-HD	Air/Water/Soil Temp (6' cable)	$39				√		♦			♦
TMC20-HD	Air/Water/Soil Temp (20' cable)	$44				√		♦			♦
TMC50-HD	Air/Water/Soil Temp (50' cable)	$50				√		♦			♦
TMC6-HC	Stainless Steel Temp probe (6' cable)	$87				√		♦			♦
TMC6-HE	Pipe Temp (6' cable)	$39				√		♦			♦

♦ This logger is intended for indoor environments, but sensors are compatible.
* Requires UX100-014M Thermocouple logger.
[1] CE Compliant

External Sensors by Measurement

Weather/Field (continued)

PAR

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-LIA-M003[1]	Photosynthetic light (PAR)	$220	√	√	♦						

Solar Radiation

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-LIB-M003[1]	Solar radiation	$210	√	√	♦						

Barometric Pressure

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-BPB-CM50[1]	Barometric pressure	$249	√	√	♦						
S-BPA-CM10[1]	HWS barometric pressure	$149		√	♦						

Wind Speed & Direction

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-WDA-M003[1]	Wind direction (3m cable)	$350	√	√	♦						
S-WSA-M003[1]	Wind speed Smart Sensor (3m cable)	$239	√	√	♦						
S-WSET-A[1]	Wind Smart Sensor set	$560	√	√	♦						
S-WCB-M003[1]	R.M. Young wind monitor-AQ adapter	$150	√	√	♦						
S-WCC-M003[1]	R.M. Young marine wind adapter	$150	√	√	♦						
S-WCE-M003[1]	R.M. Young wind monitor adapter	$150	√	√	♦						

Rainfall

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-RGA-M002[1]	.01" Rain gauge Smart Sensor (2m cable)	$410	√	√	♦						
S-RGB-M002[1]	.2mm Rain gauge Smart Sensor (2m cable)	$410	√	√	♦						

Soil Moisture

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-SMC-M005[1]	EC-5 soil moisture Smart Sensor	$139	√	√	♦						
S-SMD-M005[1]	10HS soil moisture Smart Sensor	$139	√	√	♦						

Leaf Wetness

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-LWA-M003[1]	Leaf wetness Smart Sensor	$132	√	√	♦						

Relative Humidity

Part number	Type	Price	U30	H21	H22	U12	U14	ZW	UX90	UX100	UX120
S-THB-M002[1]	12-bit Temp/RH smart (2m cable)	$189	√	√	√		√				
S-THB-M008[1]	12-bit Temp/RH smart (8m cable)	$195	√	√	√		√				

♦ This logger is intended for indoor environments, but sensors are compatible.
[1] CE Compliant

Accessories

Shuttles/Base Stations

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
U-DT-1[1]	U-Shuttle data transporter	$281	√	√			√									√	√	√[2]	
U-DT-2[1]	U30 shuttle data transporter	$281	√	√										√					
U-DTW-1[1]	Waterproof shuttle	$249			√	√			√	√	√	√	√		√				
BASE-U-1[1]	Pendant base station	$70			√	√													
BASE-U-4[1]	Optic USB base station	$124			√	√			√	√	√	√	√		√				

Computer Interface Cables

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
CABLE-PC-3.5	Serial interface cable for H-series HOBOs	$20	√	√															
CABLE-USBMB	USB cable for HOBO U-Series	$10					√	√								√	√	√	√
ADAPT-SER-USB	USB to serial interface cable for H-series HOBOs	$59	√	√															

Submersible Cases

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
SUBC2-xx	For HOBO U10 and U12 underwater use	$39					√												
DESICCANT2	Desiccant packs (25 ea)	$18																	
85-ORING	Replacement o-rings (2 ea)	$2	√																

Replacement Batteries

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
HRB-TEMP-1	Lithium batteries (box of 5)	$12				√	√									√	√		
HRB-U30-S100	10 Ahr battery w/cable	$39												√					
HP-B	Replacement battery for HOBO U23	$13									√								

For factory battery replacement and calibration services, please call 1-508-759-9500 or 1-800-LOGGERS

Replacement Couplers

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
COUPLER-UA	Coupler (for use with BASE-U-4)*	$20				√													
COUPLER2-A	Coupler (for use with BASE-U-4)	$11				√													
COUPLER2-B	Coupler (for use with BASE-U-4)	$11							√										
COUPLER2-C	Coupler (for use with BASE-U-4)	$11								√		√	√						
COUPLER2-D	Coupler (for use with BASE-U-4)	$11													√				
COUPLER2-E	Coupler (for use with BASE-U-4)	$11									√								

Subminiature Connectors

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
SMC-J	For type J wire	$10															√	√	
SMC-K	For type K wire	$10															√	√	
SMC-T	For type T wire	$10															√	√	

[1] CE Compliant
[2] Not compatible with UX120-006M
* Or U-DT-1. See page 43

Accessories

Additional Accessories

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
U12-015-03-ORING-KIT	O-ring kit (U12-015-03)	$20					√												
T-VER-AH02	Single phase fuse kit (for T-VER-E50B2 only)	$88																	
A-E50B2-LEADSET	Wiring kit (for T-VER-E50B2 only)	$41																	
A-WNB-LEADSET	Voltage input lead set with alligator clips	$75	√	√										√		√		√	√
BOOT-BLK	Protective boot, black (cap included)	$20								√									
BOOT-WHT	Protective boot, white (cap included)	$20								√									
85-CAPLUG-H20-B	Replacement cap for protective boot, black	$2								√									
85-CAPLUG-H20-W	Replacement cap for protective boot, white	$2								√									
BOOT-TIDBIT-BK	Protective boot, black (5 ea)	$25													√				
BOOT-TIDBIT-WH	Protective boot, white (5 ea)	$25													√				
U20-CASE-1	Carrying case	$33							√										
HOUSING-U2X	Protective Housing	$38							√			√							
CABLE-1-50	Teflon coated SS cable (50 ft)	$69							√			√	√						
CABLE-1-300	Teflon coated SS cable (300 ft)	$360							√			√	√						
CABLE-1-CRIMP	Crimp sleeve (12 ea) for above cables	$32							√			√	√						
SOLAR-1.2W	1.2 watt, 6 volt solar panel	$85												√					
SOLAR-3W	3 watt, 6 volt solar panel	$129												√					
SOLAR-6W	6 watt, 6 volt solar panel	$164												√					
AC-U30	AC power adapter for the U30 (AC-U30-EU[1])	$39												√					
RS1	Solar radiation shield	$79				√				√	√				√				
M-RSA	Solar radiation shield (assembled)	$116				√				√	√				√				
RS3	Solar radiation shield	$65									√								
U23-RS-CLAMPKIT	Mounting clamp (2 required)	$5									√								
UX90-LIGHT-PIPE-1	1-foot fiber optic attachment for HOBO UX90	$25														√			
CASE-PELICAN-1510	Pelican case- durable, watertight, FAA carry-on	$245	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√
CASE-4X-2	Protective, weather-resistant case	$59														√		√	

Additional Replacement Parts

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
U12-015-03-ORING-KIT	O-ring kit (U12-015-03)	$20					√												
U12-015-ORING-E	O-ring kit (EPDM)	$18					√												
U12-015-ORING-V	O-ring kit (Viton)	$18																	
H8X4-BK	Replacement parts kit	$29					√												
HUM-RHPCB-1	RH sensor	$65									√								
HUM-RHPCB-2	RH sensor (includes S-THB)	$65									√						√		√
HUM-RHPCB-3	RH sensor (for serial #s < 9847173)	$55						√											
HUM-RHPCB-3A	RH sensor (for serial #s > 9847173)	$55						√									√		
DESICCANT1	Desiccant (25 ea) for UA & U23	$13				√					√								
DESICCANT2	Desiccant (25 ea) submersible cases	$20																	
DESICCANT5	Desiccant (25 ea) for UA-003-64	$12				√													
DESIC-PACK	Desiccant (2 ea) for U12-008	$10					√												
85-DESICCANT6	Desiccant pack for HOBO Micro Station	$7	√																
UA-PARTSKIT	Parts kit for UA loggers	$20				√													
HUM-RHCAP2	RH cap kit (5 ea) (includes S-THB))	$48									√								
CABLE-TEMP/RH	Sensor cable for ZW loggers	$88																	√
CABLE-U23-002	Sensor cable	$90									√								
U26-RDOB-1	Replacement DO Sensor Cap	$85											√						

NIST Certification

Part number	Type	Price	H21	H22	RG3	UA	U12	U14	U20	U22	U23	U24	U26	U30	UTBI	UX90	UX100	UX120	ZW
NIST-SETUP	NIST traceable setup/logger	$35				√	√	√		√	√				√		√	√	√
NIST-TEMP-POINT	NIST per-point/channel	$35				√	√	√		√	√				√		√	√	√

[1] CE Compliant

Data Shuttles/Base Stations

HOBO U-Shuttle
U-DT-1[1]

The HOBO U-Shuttle data transporter provides convenient in-field data offload and relaunch of HOBO U-series loggers and HOBO Weather Stations, Micro Stations, and HOBO Energy Logger systems.

Key Advantages:

- Enables convenient, easy data offload from HOBO U-Series, H21 and H22 data loggers and UX[2] data loggers (Base Station required for Optic USB loggers)
- Provides safe transport of data back to a computer
- Stores data from multiple data loggers
- Displays logger status, including memory, battery level, and sensor readings for some sensors (on some models)
- CABLE-HOBO-SHTL and CABLE-USBMB included

HOBO U30 Shuttle
U-DT-2[1]

The HOBO U-DT-2 U30 Shuttle data transporter provides convenient in-field data offload and relaunch of HOBO U30 NRC systems and HOBO Weather Stations (H21), Micro Stations, and HOBO Energy Logger systems (H22).

Key Advantages:

- Enables convenient, easy data offload from HOBO U30 Series, H21 and H22 data loggers
- Provides safe transport of data back to a computer
- Stores data from multiple data loggers
- Displays logger status, including memory, battery level, and sensor readings for some sensors
- CABLE-HOBO-SHTL and CABLE-USBMB included

HOBO Waterproof Shuttle
U-DTW-1[1]

The HOBO Waterproof Shuttle provides convenient readout and relaunching of underwater and outdoor HOBO loggers with an Optic USB interface, and is waterproof to 20 meters (66 feet). The HOBO Waterproof Shuttle can also be used as a Base Station.

Key Advantages:

- Can be used either as a data shuttle or an Optic USB Base Station
- Supports all HOBO Optic USB loggers
- Outdoor or underwater data readout
- Convenient direct USB connection to host computer
- Waterproof to 20 meters
- Checks and indicates its own battery status

HOBO Base Station
BASE-U-4[1]

The HOBO Optic USB Base Station and a series of couplers are used to offload data from any HOBO data logger with an Optic USB interface. The Optic USB Base Station connects to your computer via USB, while connecting to the logger via an appropriate coupler.

Key Advantages:

- Provides fast optical infrared (IR) communications for easy launch and readout of all HOBO Optic USB loggers
- Splash-resistant

[1] CE Compliant
[2] Not compatible with UX120-006M

Data Shuttles/Base Stations

Pendant Base Station
BASE-U-1[1]

The Pendant Base Station and Coupler provide fast optical infrared (IR) communication for easy logger launch and readout of HOBO Pendant loggers. The Base Station connects via USB to a host computer, while the coupler attaches the logger to the Base Station for communications.

Key Advantages:

- Provides fast optical communications for easy launch and readout of all HOBO Pendant loggers
- Connects via USB cable to host computer
- Splash-resistant

HOBO Shuttle and Base Station Compatibility

		U-Shuttle Data Transporter U-DT-1[1]	U30 Shuttle Data Transporter U-DT-2[1]	Waterproof Shuttle U-DTW-1*[1]	Pendant Base Station BASE-U-1[1]	Optic USB Base Station BASE -U-4*[1]
Price		$281	$281	$249	$70	$115
Storage Capacity	504 loggers/8k memory	√				
	63 loggers/64k memory	√		√		
	7 loggers/512k memory	√	√			
HOBO UX90		√				
HOBO UX100		√				
HOBO UX120		√[2]				
HOBO U12		√				
HOBO U24		√B		√		√
HOBO U26		√B		√		√
HOBO Pendant		√B		√	√	√
HOBO U20		√B		√		√
HOBO U22		√B		√		√
HOBO U23		√B		√		√
UTBI TidbiT Temp V2		√B		√		√
RG3 Rain Gauge		√B		√	√	√
HOBO H21		√	√			
HOBO H22		√	√			
HOBO U30			√			

*Couplers are included
Products with a "√B" require a Base Station for use with the U-Shuttle.
[1] CE Compliant
[2] Not compatible with UX120-006M

The Onset Advantage

Responsiveness

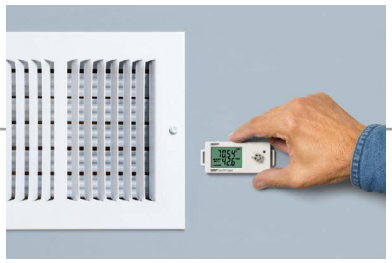
Your projects have tight deadlines that your monitoring partner must be able to meet. Onset offers a highly responsive, dynamic manufacturing environment where we build and ship all our products directly from our headquarters on Cape Cod. Our centralized operations and large capacity enable us to provide fast turnaround to meet your tight project deadlines. Most orders ship within 24 hours.

Reliable, Accurate Data

No matter what your application involves, at the end of the day it all comes down to the integrity of your data. HOBOs, which have become a generic name for data loggers in many markets, are known for providing the most reliable, accurate energy and environmental data under some of the world's toughest environmental conditions.

Simple & Cost-Effective

At Onset, we realize that the technology skill set of our customers and their technology budgets can vary widely. For this reason, our products are designed from the ground up with ease-of-use and affordability in mind.

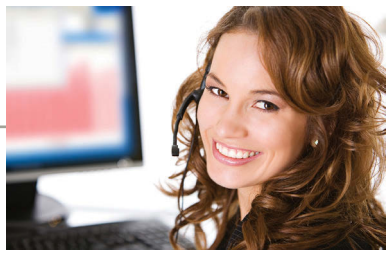


Applications Expertise

With more than three decades of experience in solving data logging applications, Onset has developed an applications expertise that is second to none. Whether you are measuring building energy performance or studying water and field ecology, chances are we have seen your application before and know what it takes to solve it.

World Class Support

Many of our new customers are surprised to find that when they call Onset, a live person answers the phone. Our world-class technical service department is staffed by friendly, knowledgeable people who listen carefully to your questions and guide you through any challenges that arise. Unlike many technology companies, Onset offers free technical support for the life cycle of your purchase.



"Temperature and relative humidity monitoring is critical to the preservation of our records. Traditional data loggers would have provided the data we needed, but we didn't want to spend a lot of time manually retrieving the data throughout the building.

The wireless data nodes are helping us make sure that our archives are getting the best protection possible."

Harold Stoehr
Network Administrator
Washington State Archives

About Onset

Onset is a leading supplier of data loggers. Our HOBO data loggers and weather stations are used around the world in a broad range of monitoring applications, from verifying the performance of green buildings and renewable energy systems to agricultural and coastal research.

Based on Cape Cod, Massachusetts, Onset has sold more than 2.5 million data loggers since the company's founding in 1981.

Onset headquarters, Cape Cod, MA

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Patented technology (U.S. Patent 6,826,664)

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AEE Association of Energy Engineers®

Designed & Assembled in the USA

onset®

HOBO® Data Loggers